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PROBES AND DECODER OLIGONUCLEOTIDES

This application claims the benefit of U.S.S.N.s 60/227,948 filed August 25, 2000 and 60/228,854, filed August 29, 2001, both of which are expressly incorporated herein by reference.

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FIELD OF THE INVENTION

The present invention is directed to methods and compositions for the use of adapter sequences on arrays in a variety of nucleic acid reactions, including synthesis reactions, amplification reactions, and genotyping reactions.

BACKGROUND OF THE INVENTION

The detection of specific nucleic acids is an important tool for diagnostic medicine and molecular biology research. Gene probe assays currently play roles in identifying infectious organisms such as bacteria and viruses, in probing the expression of normal and mutant genes and identifying mutant genes such as oncogenes, in typing tissue for compatibility preceding tissue transplantation, in matching tissue or blood samples for forensic medicine, and for exploring homology among genes from different species.

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Ideally, a gene probe assay should be sensitive, specific and easily automatable (for a review, see Nickerson, Current Opinion in Biotechnology 4:48-51 (1993)). The requirement for sensitivity (i.e. low detection limits) has been greatly alleviated by the development of the polymerase chain reaction (PCR) and other amplification technologies which allow researchers to amplify exponentially a specific nucleic acid sequence before analysis (for a review, see Abramson et al., Current Opinion in Biotechnology, 4:41-47 (1993)).

Specificity, in contrast, remains a problem in many currently available gene probe assays. The extent of molecular complementarity between probe and target defines the specificity of the interaction. Variations in the concentrations of probes, of targets and of salts in the hybridization medium, in the reaction temperature, and in the length of the probe may alter or influence the specificity of the

probe/target interaction.

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It may be possible under some circumstances to distinguish targets with perfect complementarity from targets with mismatches, although this is generally very difficult using traditional technology, since small variations in the reaction conditions will alter the hybridization. New experimental techniques for mismatch detection with standard probes include DNA ligation assays where single point mismatches prevent ligation and probe digestion assays in which mismatches create sites for probe cleavage.

Recent focus has been on the analysis of the relationship between genetic variation and phenotype by making use of polymorphic DNA markers. Previous work utilized short tandem repeats (STRs) as polymorphic positional markers; however, recent focus is on the use of single nucleotide polymorphisms (SNPs), which occur at an average frequency of more than 1 per kilobase in human genomic DNA. Some SNPs, particularly those in and around coding sequences, are likely to be the direct cause of therapeutically relevant phenotypic variants and/or disease predisposition. There are a number of well known polymorphisms that cause clinically important phenotypes; for example, the apoE2/3/4 variants are associated with different relative risk of Alzheimer's and other diseases (see Cordor et al., Science 261(1993). Multiplex PCR amplification of SNP loci with subsequent hybridization to oligonucleotide arrays has been shown to be an accurate and reliable method of simultaneously genotyping at least hundreds of SNPs; see Wang et al., Science, 280:1077 (1998); see also Schafer et al., Nature Biotechnology 16:33-39 (1998). The compositions of the present invention may easily be substituted for the arrays of the prior art.

There are a variety of particular techniques that are used to detect sequence, including mutations and SNPs. These include, but are not limited to, ligation based assays, cleavage based assays (mismatch and invasive cleavage such as Invader™), single base extension methods (see WO 92/15712, EP 0 371 437 B1, EP 0317 074 B1; Pastinen et al., Genome Res. 7:606-614 (1997); Syvänen, Clinica Chimica Acta 226:225-236 (1994); and WO 91/13075), and competitive probe analysis (e.g. competitive sequencing by hybridization; see below).

Oligonucleotide ligation amplification ("OLA", which is referred as the ligation chain reaction (LCR) when two-stranded reactions or nested reactions are done) involves the ligation of two smaller probes into a single long probe, using the target sequence as the template. See generally U.S. Patent Nos. 5,185,243, 5,679,524 and 5,573,907; EP 0 320 308 B1; EP 0 336 731 B1; EP 0 439 182 B1; WO 90/01069; WO 89/12696; WO 97/31256 and WO 89/09835, all of which are incorporated by reference.

Invasive cleavage technology is based on structure-specific nucleases that cleave nucleic acids in a site-specific manner. Two probes are used: an "invader" probe and a "signalling" probe, that adjacently hybridize to a target sequence with a non-complementary overlap. The enzyme cleaves at the overlap due to its recognition of the "tail", and releases the "tail" with a label. This can then be

detected. The Invader[™] technology is described in U.S. Patent Nos. 5,846,717; 5,614,402; 5,719,028; 5,541,311; and 5,843,669, all of which are hereby incorporated by reference.

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An additional techniqu utilizes sequencing by hybridization. For example, sequencing by hybridization has been described (Drmanac et al., Genomics 4:114 (1989); Koster et al., Nature Biotechnology 14:1123 (1996); U.S. Patent Nos. 5,525,464; 5,202,231 and 5,695,940, among others, all of which are hereby expressly incorporated by reference in their entirety).

Sensitivity, i.e. detection limits, remain a significant obstacle in nucleic acid detection systems, and a variety of techniques have been developed to address this issue. Briefly, these techniques can be classified as either target amplification or signal amplification. Target amplification involves the amplification (i.e. replication) of the target sequence to be detected, resulting in a significant increase in the number of target molecules. Target amplification strategies include the polymerase chain reaction (PCR), strand displacement amplification (SDA), and nucleic acid sequence based amplification (NASBA).

Alternatively, rather than amplify the target, alternate techniques use the target as a template to replicate a signalling probe, allowing a small number of target molecules to result in a large number of signalling probes, that then can be detected. Signal amplification strategies include the ligase chain reaction (LCR), cycling probe technology (CPT), invasive cleavage techniques such as Invader[™] technology, Q-Beta replicase (QβR) technology, and the use of "amplification probes" such as "branched DNA" that result in multiple label probes binding to a single target sequence.

The polymerase chain reaction (PCR) is widely used and described, and involves the use of primer extension combined with thermal cycling to amplify a target sequence; see U.S. Patent Nos. 4,683,195 and 4,683,202, and PCR Essential Data, J. W. Wiley & sons, Ed. C.R. Newton, 1995, all of which are incorporated by reference. In addition, there are a number of variations of PCR which also find use in the invention, including "quantitative competitive PCR" or "QC-PCR", "arbitrarily primed PCR" or "AP-PCR", "immuno-PCR", "Alu-PCR", "PCR single strand conformational polymorphism" or "PCR-SSCP", allelic PCR (see Newton et al. Nucl. Acid Res. 17:2503 91989); "reverse transcriptase PCR" or "RT-PCR", "biotin capture PCR", "vectorette PCR". "panhandle PCR", and "PCR select cDNA subtraction", among others.

Strand displacement amplification (SDA) is generally described in Walker et al., in Molecular Methods for Virus Detection, Academic Press, Inc., 1995, and U.S. Patent Nos. 5,455,166 and 5,130,238, all of which are hereby incorporated by reference.

Nucleic acid sequence based amplification (NASBA) is generally described in U.S. Patent No. 5,409,818 and "Profiting from Gene-based Diagnostics", CTB International Publishing Inc., N.J., 1996,

both of which are incorporated by reference.

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Cycling probe technology (CPT) is a nucleic acid detection system based on signal or probe amplification rather than target amplification, such as is done in polymerase chain reactions (PCR). Cycling probe technology relies on a molar excess of labeled probe which contains a scissile linkage of RNA. Upon hybridization of the probe to the target, the resulting hybrid contains a portion of RNA:DNA. This area of RNA:DNA duplex is recognized by RNAseH and the RNA is excised, resulting in cleavage of the probe. The probe now consists of two smaller sequences which may be released, thus leaving the target intact for repeated rounds of the reaction. The unreacted probe is removed and the label is then detected. CPT is generally described in U.S. Patent Nos. 5,011,769, 5,403,711, 5,660,988, and 4,876,187, and PCT published applications WO 95/05480, WO 95/1416, and WO 95/00667, all of which are specifically incorporated herein by reference.

The oligonucleotide ligation assay (OLA) involve the ligation of at least two smaller probes into a single long probe, using the target sequence as the template for the ligase. See generally U.S. Patent Nos. 5,185,243, 5,679,524 and 5,573,907; EP 0 320 308 B1; EP 0 336 731 B1; EP 0 439 182 B1; WO 90/01069; WO 89/12696; and WO 89/09835, all of which are incorporated by reference.

Invader™ technology is based on structure-specific polymerases that cleave nucleic acids in a site-specific manner. Two probes are used: an "invader" probe and a "signalling" probe, that adjacently hybridize to a target sequence with overlap. For mismatch discrimination, the invader technology relies on complementarity at the overlap position where cleavage occurs. The enzyme cleaves at the overlap, and releases the "tail" which may or may not be labeled. This can then be detected. The Invader™ technology is described in U.S. Patent Nos. 5,846,717; 5,614,402; 5,719,028; 5,541,311; and 5,843,669, all of which are hereby incorporated by reference.

"Branched DNA" signal amplification relies on the synthesis of branched nucleic acids, containing a multiplicity of nucleic acid "arms" that function to increase the amount of label that can be put onto one probe. This technology is generally described in U.S. Patent Nos. 5,681,702, 5,597,909, 5,545,730, 5,594,117, 5,591,584, 5,571,670, 5,580,731, 5,571,670, 5,591,584, 5,624,802, 5,635,352, 5,594,118, 5,359,100, 5,124,246 and 5,681,697, all of which are hereby incorporated by reference.

Similarily, dendrimers of nucleic acids serve to vastly increase the amount of label that can be added to a single molecule, using a similar idea but different compositions. This technology is as described in U.S. Patent No. 5,175,270 and Nilsen et al., J. Theor. Biol. 187:273 (1997), both of which are incorporated herein by reference.

U.S.S.N.s 09/189,543; 08/944,850; 09/033,462; 09/287,573; 09/151,877; 09/187,289 and 09/256,943; and PCT applications US98/09163 and US99/14387; US98/21193; US99/04473 and US98/05025, all

of which are expressly incorporated by reference, describe novel compositions utilizing substrates with microsphere arrays, which allow for novel detection methods of nucleic acid hybridization.

The use of adapter-type sequences that allow the use of universal arrays has been described in limited contexts; see for example Chee et al., Nucl. Acid Res. 19:3301 (1991); Shoemaker et al., Nature Genetics 14:450 (1996); U.S. Patent Nos. 5,494,810, 5,830,711, 6,027,889, 6,054,564, and 6,268,148; and EP 0 799 897 A1; WO 97/31256, all of which are expressly incorporated by reference.

Accordingly, it is an object of the present invention to provide methods for detecting nucleic acid reactions, and other target analytes, on arrays using adapter sequences.

SUMMARY OF THE INVENTION

In accordance with the above objects, the invention also provides a method of detecting a target nucleic acid. The method comprises contacting the target nucleic acid with an adapter sequence such that the target nucleic acid is joined to the adapter sequence to form a modified target nucleic acid. In addition, the method comprises contacting the modified target nucleic acid with an array comprising a substrate with a surface comprising discrete sites and a population of microspheres comprising at least a first subpopulation comprising a first capture probe, such that the first capture probe and the modified target nucleic acid form a complex, wherein the microspheres are distributed on the surface, and detecting the presence fo the target nucleic acid. In addition the method comprises adding at least one decoding binding ligand to the array such that the identity of the target nucleic acid is determined. Preferably the adapter nucleic acids include a sequence as set forth in Table Table I, Table II, Table III or Table IV.

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In addition the invention provides a method of making an array. The method comprises forming a surface comprising individual sites on a substrate, distributing microspheres on the surface such that the individual sites contain microspheres, wherein the microspheres comprise at least a first and a second subpopulation each comprising a capture probe, wherein the capture probe is complementary to an adapter sequence, the adapter sequence joined to a target nucleic acid, and an identifier binding ligand that will bind at least one decoder binding ligand such that the identification of the target nucleic acid is elucidated. Preferably the adapter nucleic acids include a sequence as set forth in Table I, Table III or Table IV.

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In addition the invention provides a kit comprising at least one nucleic acid selected from the group consisting of the sequences set forth it Table I, Table II, Table III or Table IV. In one embodiment the invention provides a kit that includes a nucleic acid that includes a sequence as set forth in Table I, Table II, Table III or Table IV and at least a first universal priming sequence.

In addition the invention includes an array composition comprising a first population of microspheres comprising first and second subpopulations, wherein the first subpopulation includes a first nucleic acid selected from the sequences set forth in Table I, Table II, Table III or Table IV and the second subpopulation includes a second sequence selected from the sequences set forth in Table II, Table III or Table IV.

In addition the invention includes an array composition comprising a first sequence at a known location on a substrate, wherein the first sequence is selected from the sequences set forth in Table II, Table III or Table IV.

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In addition the invention includes a method for making an array. The method includes distributing a population of microspheres on an substrate, wherein the population includes first and second subpopulations, wherein the first subpopulation includes a first sequence selected from the group consisting of the sequences set forth in Table I, Table II, Table III or Table IV and the second subpopulation includes a second sequence selected from the group consisting of the sequences set forth in Table I, Table II, Table III or Table IV.

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In addition the method includes a method of immobilizing a target nucleic acid. The method includes hybridizing a first adapter probe with a first target nucleic acid, wherein the first adapter probe comprises a first domain that is complementary to the first target nucleic acid and a second domain, comprising a first sequence selected from the sequences set forth in Table I, Table II, Table III or Table IV to form a first hybridization complex. In addition the method includes contacting the first hybridization complex with a first capture probe immobilized on a first substrate, wherein the first capture probe is substantially complementary to the second domain of the first adapter probe.

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In addition the invention includes a method of decoding an array composition comprising providing an array composition that includes a substrate with a surface comprising discrete sites and a population of microspheres comprising at least a first and a second subpopulation, wherein each subpopulation comprises a bioactive agent. The microspheres are distributed on the surface. The method further includes adding a plurality of decoding binding ligands to the array composition to identify the location of at least a plurality of the bioactive agents wherein at least a first decoder binding ligand comprises a sequence selected from the group consisting of the sequences of Table I, Table II, Table III or Table IV.

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A method of detecting a target nucleic acid sequence, said method comprising attaching a first adapter nucleic acid to a first target nucleic acid sequence to form a modified first target nucleic acid sequence, wherein the first adapter nucleic acid includes a sequence selected from the sequences set forth in Table I, Table III or Table IV. The method further includes contacting the modified first target nucleic acid sequence with an array comprising a substrate with a patterned surface

comprising discrete sites and a population of microspheres comprising at least a first subpopulation comprising a first capture probe, such that the first capture probe and the modified first target nucleic acid sequence form a hybridization complex; wherein the microspheres are distributed on the surface and detecting the presence of the modified first target nucleic acid sequenc

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DETAILED DESCRIPTION OF THE FIGURES

Figure 1 depicts a method of selecting oligonucleotide sequences.

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Figure 2 depicts a scheme for selection of probes and decoder oligonucleotides.

Figure 3 demonstrates hybridization intensity comparison of immobilized beads using non-purified oligonucleotides with HPLC purified oligonucleotides.

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Figure 4 depicts different oligonucleotide sequences immobilized onto silica beads at various salt concentration. Average intensity indicates hybridization intensity of beads in a BeadArray.

Figure 5 depicts immobilization of oligonucleotides in increasing salt concentrations.

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DETAILED DESCRIPTION OF THE INVENTION

This invention is directed to the use of adapter sequences, and optionally capture extender probes, that allow the use of "universal" arrays. That is, a "universal" array is an array with a set of capture probes that will hybridize to adapter sequences, for use in any number of different reactions, including the binding of nucleic acid reactions and other target analytes comprising a nucleic acid adapter sequence that can hybridize to the array. In this way, a manufacturer of arrays can make one type of array that may be used in a variety of applications, thus reducing the manufacturing costs associated with the array. In addition, in the case of bead arrays, the decoding steps as outlined below can be simplified, as one set of decoding probes can be made.

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In general, the use of adapter sequences can be described as follows for nucleic acid reactions. An adapter sequence can be added exogenously to a target nucleic acid sequence using any number of different techniques, including, but not limited to, amplification reactions as described in U.S.S.N. 09/425,633, filed October 22, 1999; 09/513,362, filed February 25, 2000; 09/517,945, filed March 3, 2000; 09/535,854, filed March 27, 2000; 09/553,993, filed April 20, 2000; 09/556,463, filed April 21, 2000; 60/135,051, filed May 20, 1999; 60/135,053, filed May 20, 1999; 60/135,123, filed May 20, 1999; 60/130,089, filed April 20, 1999; 60/160,917, filed October 22, 1999; 60/160,927, filed October 22,

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1999; 60/161,148, filed October 22, 1999; and 60/244,119, filed October 26, 2000 all of which are hereby incorporated by reference. In addition, the adapter can be added to an extension probe. The adapter sequence can then be used to target to its complementary capture probe on the surface.

Alternatively, the adapter sequences can be added to other target analytes, to generate unique and reproducible arrays of target analytes in a similar manner. By adding the nucleic acid to the target analyte (for example to an antibody in an immunoassay), the target analytes may then be arrayed.

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Accordingly, the present invention provides methods for the detection of target analytes, particularly nucleic acid target sequences, in a sample. As will be appreciated by those in the art, the sample solution may comprise any number of things, including, but not limited to, bodily fluids (including, but not limited to, blood, urine, serum, lymph, saliva, anal and vaginal secretions, perspiration and semen, of virtually any organism, with mammalian samples being preferred and human samples being particularly preferred); environmental samples (including, but not limited to, air, agricultural, water and soil samples); biological warfare agent samples; research samples; purified samples, such as purified genomic DNA, RNA, proteins, etc.; raw samples (bacteria, virus, genomic DNA, etc.; As will be appreciated by those in the art, virtually any experimental manipulation may have been done on the sample.

The present invention provides methods for the detection of target analytes, particularly nucleic acid target sequences, in a sample. By "target analyte" or "analyte" or grammatical equivalents herein is meant any molecule, compound or particle to be detected. As outlined below, target analytes preferably bind to binding ligands, as is more fully described below. As will be appreciated by those in the art, a large number of analytes may be detected using the present methods; basically, any target analyte for which a binding ligand, described below, may be made may be detected using the methods of the invention.

Suitable analytes include organic and inorganic molecules, including biomolecules. In a preferred embodiment, the analyte may be an environmental pollutant (including pesticides, insecticides, toxins, etc.); a chemical (including solvents, polymers, organic materials, etc.); therapeutic molecules (including therapeutic and abused drugs, antibiotics, etc.); biomolecules (including hormones, cytokines, proteins, lipids, carbohydrates, cellular membrane antigens and receptors (neural, hormonal, nutrient, and cell surface receptors) or their ligands, etc); whole cells (including procaryotic (such as pathogenic bacteria) and eukaryotic cells, including mammalian tumor cells); viruses (including retroviruses, herpesviruses, adenoviruses, lentiviruses, etc.); and spores; etc. Particularly preferred analytes are environmental pollutants; nucleic acids; proteins (including enzymes, antibodies, antigens, growth factors, cytokines, etc.); therapeutic and abused drugs; cells; and viruses.

In a preferred embodiment, the target analyte is a protein. As will be appreciated by those in the art.

there are a large number of possible proteinaceous target analytes that may be detected using the present invention. By "proteins" or grammatical equivalents herein is meant proteins, oligopeptides and peptides, derivatives and analogs, including proteins containing non-naturally occurring amino acids and amino acid analogs, and peptidomimetic structures. The side chains may be in either the (R) or the (S) configuration. In a preferred embodiment, the amino acids are in the (S) or L-configuration. As discussed below, when the protein is used as a binding ligand, it may be desirable to utilize protein analogs to retard degradation by sample contaminants.

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Suitable protein target analytes include, but are not limited to, (1) immunoglobulins, particularly lgEs. laGs and laMs, and particularly therapeutically or diagnostically relevant antibodies, including but not limited to, for example, antibodies to human albumin, apolipoproteins (including apolipoprotein E). human chorionic gonadotropin, cortisol, α-fetoprotein, thyroxin, thyroid stimulating hormone (TSH). antithrombin, antibodies to pharmaceuticals (including antieptileptic drugs (phenytoin, primidone, carbariezepin, ethosuximide, valproic acid, and phenobarbitol), cardioactive drugs (digoxin, lidocaine, procainamide, and disopyramide), bronchodilators (theophylline), antibiotics (chloramphenicol, sulfonamides), antidepressants, immunosuppresants, abused drugs (amphetamine, methamphetamine, cannabinoids, cocaine and opiates) and antibodies to any number of viruses (including orthomyxoviruses, (e.g. influenza virus), paramyxoviruses (e.g respiratory syncytial virus, mumps virus, measles virus), adenoviruses, rhinoviruses, coronaviruses, reoviruses, togaviruses (e.g. rubella virus), parvoviruses, poxviruses (e.g. variola virus, vaccinia virus), enteroviruses (e.g. poliovirus, coxsackievirus), hepatitis viruses (including A, B and C), herpesviruses (e.g. Herpes simplex virus, varicella-zoster virus, cytomegalovirus, Epstein-Barr virus), rotaviruses, Norwalk viruses, hantavirus, arenavirus, rhabdovirus (e.g. rabies virus), retroviruses (including HIV, HTLV-l and -II), papovaviruses (e.g. papillomavirus), polyomaviruses, and picornaviruses, and the like), and bacteria (including a wide variety of pathogenic and non-pathogenic prokaryotes of interest including Bacillus; Vibrio, e.g. V. cholerae; Escherichia, e.g. Enterotoxigenic E. coli, Shigella, e.g. S. dysenteriae; Salmonella, e.g. S. typhi; Mycobacterium e.g. M. tuberculosis, M. leprae; Clostridium, e.g. C. botulinum, C. tetani, C. difficile, C.perfringens; Cornyebacterium, e.g. C. diphtheriae; Streptococcus. S. pyogenes, S. pneumoniae; Staphylococcus, e.g. S. aureus; Haemophilus, e.g. H. influenzae; Neisseria, e.g. N. meningitidis, N. gonomhoeae; Yersinia, e.g. G. lambliaY: pestis, Pseudomonas, e.g. P. aeruginosa, P. putida; Chlamydia, e.g. C. trachomatis; Bordetella, e.g. B. pertussis; Treponema, e.g. T. palladium; and the like); (2) enzymes (and other proteins), including but not limited to, enzymes used as indicators of or treatment for heart disease, including creatine kinase, lactate dehydrogenase, aspartate amino transferase, troponin T, myoglobin, fibrinogen, cholesterol, triglycerides, thrombin, tissue plasminogen activator (tPA); pancreatic disease indicators including amylase, lipase, chymotrypsin and trypsin; liver function enzymes and proteins including cholinesterase, bilirubin, and alkaline phosphotase; aldolase, prostatic acid phosphatase, terminal deoxynucleotidyl transferase, and bacterial and viral enzymes such as HIV protease; (3) hormones and cytokines (many of which serve as ligands for cellular receptors) such as erythropoietin (EPO), thrombopoietin (TPO), the interleukins

(including IL-1 through IL-17), insulin, insulin-like growth factors (including IGF-1 and -2), epidermal growth factor (EGF), transforming growth factors (including TGF- α and TGF- β), human growth hormone, transferrin, epidermal growth factor (EGF), low density lipoprotein, high density lipoprotein, leptin, VEGF, PDGF, ciliary neurotrophic factor, prolactin, adrenocorticotropic hormone (ACTH), calcitonin, human chorionic gonadotropin, cotrisol, estradiol, follicle stimulating hormone (FSH), thyroid-stimulating hormone (TSH), leutinzing hormone (LH), progeterone, testosterone, ; and (4) other proteins (including α -fetoprotein, carcinoembryonic antigen CEA.

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In addition, any of the biomolecules for which antibodies may be detected may be detected directly as well; that is, detection of virus or bacterial cells, therapeutic and abused drugs, etc., may be done directly.

Suitable target analytes include carbohydrates, including but not limited to, markers for breast cancer (CA15-3, CA 549, CA 27.29), mucin-like carcinoma associated antigen (MCA), ovarian cancer (CA125), pancreatic cancer (DE-PAN-2), and colorectal and pancreatic cancer (CA 19, CA 50, CA242).

In a preferred embodiment, the target analyte (and various adapters and other probes of the invention), comprise nucleic acids. By "nucleic acid" or "oligonucleotide" or grammatical equivalents herein means at least two nucleotides covalently linked together. A nucleic acid of the present invention will generally contain phosphodiester bonds, although in some cases, as outlined below, nucleic acid analogs are included that may have alternate backbones, comprising, for example. phosphoramide (Beaucage et al., Tetrahedron 49(10):1925 (1993) and references therein; Letsinger. J. Org. Chem. 35:3800 (1970); Sprinzl et al., Eur. J. Biochem. 81:579 (1977); Letsinger et al., Nucl. Acids Res. 14:3487 (1986); Sawai et al, Chem. Lett. 805 (1984), Letsinger et al., J. Am. Chem. Soc. 110:4470 (1988); and Pauwels et al., Chemica Scripta 26:141 91986)), phosphorothioate (Mag et al., Nucleic Acids Res. 19:1437 (1991); and U.S. Patent No. 5,644,048), phosphorodithioate (Briu et al., J. Am. Chem. Soc. 111:2321 (1989), O-methylphophoroamidite linkages (see Eckstein, Oligonucleotides and Analogues: A Practical Approach, Oxford University Press), and peptide nucleic acid backbones and linkages (see Egholm, J. Am. Chem. Soc. 114:1895 (1992); Meier et al., Chem. Int. Ed. Engl. 31:1008 (1992); Nielsen, Nature, 365:566 (1993); Carlsson et al., Nature 380:207 (1996), all of which are incorporated by reference). Other analog nucleic acids include those with positive backbones (Denpcy et al., Proc. Natl. Acad. Sci. USA 92:6097 (1995); non-ionic backbones (U.S. Patent Nos. 5,386,023, 5,637,684, 5,602,240, 5,216,141 and 4,469,863; Kledrowshi et al., Angew. Chem. Intl. Ed. English 30:423 (1991); Letsinger et al., J. Am. Chem. Soc. 110:4470 (1988); Letsinger et al., Nucleoside & Nucleotide 13:1597 (1994); Chapters 2 and 3, ASC Symposium Series 580, "Carbohydrate Modifications in Antisense Research", Ed. Y.S. Sanghui and P. Dan Cook; Mesmaeker et al., Bioorganic & Medicinal Chem. Lett. 4:395 (1994); Jeffs et al., J. Biomolecular NMR 34:17 (1994); Tetrahedron Lett. 37:743 (1996)) and non-ribose backbones, including those described in U.S.

Patent Nos. 5,235,033 and 5,034,506, and Chapters 6 and 7, ASC Symposium Series 580, "Carbohydrate Modifications in Antis nse Research", Ed. Y.S. Sanghui and P. Dan Cook. Nucleic acids containing one or more carbocyclic sugars are also included within the definition of nucleic acids (see Jenkins et al., Chem. Soc. Rev. (1995) pp169-176). Several nucleic acid analogs are described in Rawls, C & E News June 2, 1997 page 35. All of these references are hereby expressly incorporated by reference. These modifications of the ribose-phosphate backbone may be done to facilitate the addition of labels, alter the hybridization properties of the nucleic acids, or to increase the stability and half-life of such molecules in physiological environments.

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As will be appreciated by those in the art, all of these nucleic acid analogs may find use in the present invention. In addition, mixtures of naturally occurring nucleic acids and analogs can be made.

Alternatively, mixtures of different nucleic acid analogs, and mixtures of naturally occurring nucleic acids and analogs may be made.

Particularly preferred are peptide nucleic acids (PNA) which includes peptide nucleic acid analogs. These backbones are substantially non-ionic under neutral conditions, in contrast to the highly charged phosphodiester backbone of naturally occurring nucleic acids. This results in two advantages. First, the PNA backbone exhibits improved hybridization kinetics. PNAs have larger changes in the melting temperature (Tm) for mismatched versus perfectly matched basepairs. DNA and RNA typically exhibit a 2-4°C drop in Tm for an internal mismatch. With the non-ionic PNA backbone, the drop is closer to 7-9°C. This allows for better detection of mismatches. Similarly, due to their non-ionic nature, hybridization of the bases attached to these backbones is relatively insensitive to salt concentration.

The nucleic acids may be single stranded or double stranded, as specified, or contain portions of both double stranded or single stranded sequence. The nucleic acid may be DNA, both genomic and cDNA, RNA or a hybrid, where the nucleic acid contains any combination of deoxyribo- and ribo-nucleotides, and any combination of bases, including uracil, adenine, thymine, cytosine, guanine, inosine, xathanine hypoxathanine, isocytosine, isoguanine, etc. A preferred embodiment utilizes isocytosine and isoguanine in nucleic acids designed to be complementary to other probes, rather than target sequences, as this reduces non-specific hybridization, as is generally described in U.S. Patent No. 5,681,702. As used herein, the term "nucleoside" includes nucleotides as well as nucleoside and nucleotide analogs, and modified nucleosides such as amino modified nucleosides. In addition, "nucleoside" includes non-naturally occuring analog structures. Thus for example the individual units of a peptide nucleic acid, each containing a base, are referred to herein as a nucleoside.

In general, probes of the present invention (including adapter sequences and capture probes, described below) are designed to be complementary to a target sequence (either the target sequence of the sample or to other probe sequences, for example adapter sequences) such that hybridization of the target and the probes of the present invention occurs. This complementarity need not be perfect;

there may be any number of base pair mismatches that will interfere with hybridization between the target sequence and the single stranded nucleic acids of the present invention. However, if the number of mutations is so great that no hybridization can occur under even the least stringent of hybridization conditions, the sequence is not a complementary target sequence. Thus, by "substantially complementary" herein is meant that the probes are sufficiently complementary to the target sequences to hybridize under the selected reaction conditions.

When nucleic acids are to be detected, they are referred to herein as "target nucleic acids" or "target sequences". The term "target sequence" or "target nucleic acid" or grammatical equivalents herein means a nucleic acid sequence on a single strand of nucleic acid. The target sequence may be a portion of a gene, a regulatory sequence, genomic DNA, cDNA, RNA including mRNA and rRNA, or others. As is outlined herein, the target sequence may be a target sequence from a sample, or a derivative target such as a product of a reaction such as a detection sequence from an invader™ reaction, a ligated probe from an OLA reaction, an extended probe from an SBE reaction, etc. It may be any length, with the understanding that longer sequences are more specific. As will be appreciated by those in the art, the complementary target sequence may take many forms. For example, it may be contained within a larger nucleic acid sequence, i.e. all or part of a gene or mRNA, a restriction fragment of a plasmid or genomic DNA, among others. As is outlined more fully below, probes are made to hybridize to target sequences to determine the presence or absence of the target sequence in a sample. Generally speaking, this term will be understood by those skilled in the art. The target sequence may also be comprised of different target domains; for example, a first target domain of the sample target sequence may hybridize to a capture probe, a second target domain may hybridize to a portion of a label probe, etc. The target domains may be adjacent or separated as indicated. Unless specified, the terms "first" and "second" are not meant to confer an orientation of the sequences with respect to the 5'-3' orientation of the target sequence. For example, assuming a 5'-3' orientation of the complementary target sequence, the first target domain may be located either 5' to the second domain, or 3' to the second domain. In addition, as will be appreciated by those in the art, the probes on the surface of the array (e.g. attached to the microspheres) may be attached in either orientation, either such that they have a free 3' end or a free 5' end.

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As is more fully outlined below, the target sequence may comprise a position for which sequence information is desired, generally referred to herein as the "detection position" or "detection locus". In a preferred embodiment, the detection position is a single nucleotide, although in some embodiments, it may comprise a plurality of nucleotides, either contiguous with each other or separated by one or more nucleotides. By "plurality" as used herein is meant at least two. As used herein, the base which basepairs with a detection position base in a hybrid is termed a "readout position" or an "interrogation position".

In some embodiments, as is outlined herein, the target sequence may not be the sample target

sequence but instead is a product of a reaction herein, sometimes referred to herein as a "secondary" or "derivative" target sequence. Thus, for example, in SBE, the extended primer may serve as the target sequence; similarly, in invasive cleavage variations, the cleaved detection sequence may serve as the target sequence.

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If required, the target sequence is prepared using known techniques. For example, the sample may be treated to lyse the cells, using known lysis buffers, electroporation, etc., with purification and/or amplification as needed, as will be appreciated by those in the art.

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Once prepared, the target sequence can be used in a variety of reactions for a variety of reasons. For example, in a preferred embodiment, genotyping reactions are done. Similarly, these reactions can also be used to detect the presence or absence of a target sequence. Sequencing or amplification reactions are also preferred. In addition, in any reaction, quantitation of the amount of a target sequence may be done.

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Furthermore, as outlined below for each reaction, many of these techniques may be used in a solution based assay, wherein the reaction is done in solution and a reaction product is bound to the array for subsequent detection, or in solid phase assays, where the reaction occurs on the surface and is detected.

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In general, the present invention provides pairs of capture probes (nucleic acids that are attached to addresses on arrays) and adapter sequences (sequences that are either perfectly or substantially complementary to the capture probe sequences) that can be used in a wide variety of ways, to immobilize target nucleic acids (either primary targets, such as genomic DNA, mRNA or cDNA, or secondary targets such as amplicons from a nucleic acid amplification or extension reaction, as outlined herein) to the addresses of the array. Thus, all the sequences in the Tables include their complements, and either sequence can be used as a capture probe (e.g. spotted onto a surface or attached to a microsphere of an array) or as the adapter sequence that binds to the capture probe.

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Accordingly, by "adapter sequences" or "adapters" or grammatical equivalents is meant a nucleic acid segment generally non-native or exogenous to a target molecule that is used to immobilize the target molecule to a solid support via binding to a capture probe sequence. In a preferred embodiment the adapter sequences and capture probes are selected from the sequences set forth in Table I, Table II, Table III or Table IV.

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Table I includes the sequence of the preferred 4000 sequences labeled "Decoder (5'-3')", and inherent in this table are the complementary sequences as well. In addition, the invention includes oligonucleotides that are complementary to those depicted in Table 1.

Tabl II includes the sequence of the preferred adapter/capture probe sequences and their complementary sequence. Table 2 depicts a preferred subset of 3172 decoder oligonucleotides and their complementary probe oligonucleotides. Accordingly, the invention provides compositions comprising a sequence as outlined in Table 2. In addition, the invention provides a composition comprising a complementary binding pair as outlined in Table 2.

Table 3 includes a preferred subset of 768 decoder oligonucleotides and complementary probe sequences. In some embodiments it may be desirable to include a uniform base at a terminus of the oligonucleotide, such as a T at the 5' end as depicted in Table 4. The inclusion of this uniform or constant base facilitates uniform labeling of the oligonucleotides.

These sequences are used as decoder probes, capture probes or adapter sequences as outlined in U.S.S.N. 09/344,526 and PCT/US99/14387, and U.S.S.N.s 60/160,917 and 09/5656,463 all of which are expressly incorporated by reference in their entirety.

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As will be appreciated by those in the art, the length of the capture probe/adapter sequences will vary, depending on the desired "strength" of binding and the number of different adapters desired. In a preferred embodiment, adapter sequences range from about 5 to about 500 basepairs in length, with from about 8 to about 100 being preferred, and from about 10 to about 50 being particularly preferred.

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As will be appreciated by those in the art, it is desirable to have adapter sequences that do not have significant homology to naturally occurring target sequences, to avoid non-specific or erroneous binding of target sequences to the capture probes. Accordingly, preferred embodiments utilize some method to select useful adapter sequences. In a preferred embodiment the method is outlined in Figure 1. Briefly, random 24-mer (or could be any desired length as outlined herein), sequences were assembled and subjected to certain defined screening procedures including such steps as requiring that the Tm of each of the sequence be within a pre-defined range. In addition the GC content must be balanced with the AT content and the self-complementarity must be minimized. In addition GC runs should be minimized, that is, runs of Gs or Cs should be reduced. In addition, decoder (adapter) to decoder (adapter) complementarity should be reduced so that the adapters do not hybridize with each other. Finally, the sequences are screened against a specified genomic database. In a preferred embodiment the adapters comprise at least one sequence selected from the sequences in Table II, Table III or Table IV.

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In a preferred embodiment, the adapter sequences are chosen on the basis of a decoding step. As is more fully outlined below, a decoding step is used to decode random bead arrays. In this embodiment, a set of candidate captur probes is chosen; this may be done in a variety of ways. In a preferred embodiment, the sequences are generated randomly, each of a sufficient length to ensure a

low probability of occurring naturally. In some embodiments, for example when the array will be used with a particular organism's genome (e.g. the human genome, the Drosophila genome, etc.), the sequences are compared to the genome as a first filter, for example to remove sequences that would cross hybridize. Additionally, further filtering may be done using well-known methods, such as known methods for selecting good PCR primers. These techniques generally include steps that remove sequences that may have a propensity to form secondary structures or otherwise to cross-hybridize. Additionally, sequences that have extremes of melting temperatures can be optionally discarded, depending on the planned assay conditions.

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Once a set of candidate capture probes is obtained, an array comprising the capture probes is made, and a matching set of decoding probes comprising the adapter sequences (e.g. the complements of the capture probes), as more fully outlined below, is made. Decoding then proceeds. Probes that do not hybridize well, for whatever reason, will not decode well, generally due to weak signals, and are generally discarded. Probes that cross-hybridize will also not decode well, as they will give ambiguous or mixed decoding signals. Only probes that hybridize sufficiently strongly and specifically will decode. Thus, by setting suitable thresholds for signal strength and signal purity, adapter sequences that perform according to specified criteria are identified. Additionally, by setting a range on signal strength, capture probe/adapter sequence pairs that perform similarly (but hybridize specifically) are identified. In a preferred embodiment, decoding reactions are repeated, under a variety of conditions, to test the robustness of the sequence pair.

Once identified, the adapter sequences are added to target sequences in a variety of ways, as will be appreciated by those in the art. In a preferred embodiment, nucleic acid amplification reactions are done, as is generally outlined in "Detection of Nucleic Acid Amplification Reactions Using Bead Arrays" and "Sequence Determination of Nucleic Acids using Arrays with Microspheres", both of which were filed on October 22, 1999, (U.S.S.N.'s 60/161,148 and 09/425,633, respectively), both of which are hereby incorporated by reference in their entirety. These may be either target amplification or signal amplification. In general, the techniques can be described as follows. Most amplification techniques require one or more primers hybridizing to all or part the target sequence (e.g. that hybridize to a target domain). The adapter sequences can be added to one or more of the primers (depending on the configuration/orientation of the system and need) and the amplification reactions are run. Thus, for example, PCR primers comprising at least one adapter sequence (and preferably one on each PCR primer) may be used; one or both of the ligation probes of an OLA or LCR reaction may comprise an adapter sequence; the sequencing primers for pyrosequencing, single-base extension, reversible chain termination, etc., reactions may comprise an adapter sequence; either the invader probe or the signalling probe of invasive cleavage reactions can comprise an adapter sequence; etc. Similarly, for signal detection techniques, the probes may comprise adapter sequences, with preferred methods utilizing removal of the unreacted probes. In addition, primers may include univ real priming sequences. That is, the adapters may additionally contain universal priming sequences for universal

amplification of products of any of the reactions described herein. Universal priming sequences are further outlined in 09/779376, filed February 7, 2001; 09/779202, filed February 7, 2001; 09/915231, filed July 24, 2001; 60/180810, filed February 7, 2000; and 60/297609, filed June 11, 2001; and 60/311194 filed August 9, 2001, all of which are expressly incorporated herein by reference.

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In an alternative embodiment, non-nucleic acid reactions are used to add adapter sequences to the nucleic acid targets. For example, for the direct detection of non-amplified target sequences (e.g. genomic DNA samples, etc.) on universal arrays, non-amplification methods are required. In this embodiment, binding partner pairs or chemical methods may be used. For example, one member of a binding partner pair may be attached to the adapter sequence and the other member attached to the target sequence. For example, the binding partner be a hapten or antigen, which will bind its binding partner. For example, suitable binding partner pairs include, but are not limited to: antigens (such as proteins (including peptides)) and antibodies (including fragments thereof (FAbs, etc.)); proteins and small molecules, including biotin/streptavidin and digoxygenin and antibodies; enzymes and substrates or inhibitors; other protein-protein interacting pairs; receptor-ligands; and carbohydrates and their binding partners, are also suitable binding pairs. Nucleic acid - nucleic acid binding proteins pairs are also useful. In general, the smaller of the pair is attached to the NTP (or the probe) for incorporation into the extension primer. Preferred binding partner pairs include, but are not limited to, biotin (or imino-biotin) and streptavidin, digeoxinin and Abs, and Prolinx™ reagents.

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In a preferred embodiment, chemical attachment methods are used. In this embodiment, chemical functional groups on each of the target sequences and adapter sequences are used. As is known in the art, this may be accomplished in a variety of ways. Preferred functional groups for attachment are amino groups, carboxy groups, oxo groups and thiol groups, with amino groups being particularly preferred. Using these functional groups, the two sequences are joined together; for example, amino groups on each nucleic acid may be attached, for example using linkers as are known in the art; for example, homo-or hetero-bifunctional linkers as are well known (see 1994 Pierce Chemical Company catalog, technical section on cross-linkers, pages 155-200, incorporated herein by reference).

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In a preferred embodiment, aptamers are used in the system. Aptamers are nucleic acids that can be made to bind to virtually any target analyte; see Bock et al., Nature 355:564 (1992); Femulok et al., Current Op. Chem. Biol. 2:230 (1998); and U.S. Patents 5,270,163, 5,475,096, 5,567,588, 5,595,877, 5,637,459, 5,683,867,5,705,337, and related patents, hereby incorporated by reference.

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In a preferred embodiment, an array comprising capture probes that hybridize to adapter sequences is made, as outlined herein. In one embodiment aptamers, comprising adapter sequences, can be added. As will be appreciated by those in the art, the aptamers may be preassociated with their binding partners, e.g. target analyt s, prior to introduction to the array, or not. In addition, the association between the adapter sequences on the aptamers and the capture probes can be made

covalent, for example through the use of reactive groups (e.g. psoralen) and appropriate activation.

In addition, the present invention is directed to the use of adapter sequences to assemble arrays comprising other target analytes.

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The adapter sequences may be chosen as outlined above. Preferably the adapters are selected from the sequences set forth in Table I, Table II, Table III or Table IV. These adapter sequences can then be added to the target analytes using a variety of techniques. In general, as described above, non-covalent attachment using binding partner pairs may be done, or covalent attachment using chemical moieties (including linkers).

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Advantages of using adapters include but are not limited to, for example, the ability to create universal arrays. That is, a single array is utilized with each capture probe designed to hybridize with a specific adapter. The adapters are joined to any number of target analytes, such as nucleic acids, as is described herein. Thus, the same array is used for vastly different target analytes. Furthermore, hybridization of adapters with capture probes results in non-covalent attachment of the target nucleic acid to the address of the array (e.g. a microsphere in some embodiments). As such, the target nucleic/adapter hybrid is easily removed, and the microsphere/capture probe can be re-used. In addition, the construction of kits is greatly facilitated by the use of adapters. For example, arrays or microspheres can be prepared that comprise the capture probe; the adapters can be packaged along with the microspheres for attachment to any target analyte of interest. Thus, one need only attach the adapter to the target analyte and disperse on the array for the construction of an array of target analytes.

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Accordingly the present invention provides kits comprising adapters. Preferably the kits include at least 1 nucleic acid sequence as set forth in Table 1. More preferably the kits include at least 10-25 nucleic acids, with at least 50 nucleic acids more preferred. Even more preferable are kits that include at least 100 nucleic acids with more than 1000 even more preferred and more than 2000 even more preferred.

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It should also be noted that the sequences defined herein can also be used in "sandwich" assay formats, wherein a capture extender probe comprising a first domain that will hybridize to the capture probe and a second domain that has a target specific domain is used. The capture extender probe hybridizes both to the target sequence and the capture probe, thereby immobilizing the target sequence on the array.

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Once the adapter sequences are associated with the target analyte, including target nucleic acids, the compositions are added to an array comprising addresses comprising capture probes. In one embodiment a plurality of hybrid adapter sequence/target analytes are pooled prior to addition to an

array. All of the methods and compositions herein are drawn to compositions and methods for detecting the presence of target analytes, particularly nucleic acids, using adapter arrays.

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Accordingly, the present invention provides array compositions comprising at least a first substrate with a surface comprising individual sites. The present system finds particular utility in array formats, i.e. wherein there is a matrix of capture probes (herein generally referred to "pads", "addresses" or "micro-locations"). By "array" or "biochip" herein is meant a plurality of nucleic acids in an array format, the size of the array will depend on the composition and end use of the array. Nucleic acids arrays are known in the art, and can be classified in a number of ways; both ordered arrays (e.g. the ability to resolve chemistries at discrete sites), and random arrays are included. Ordered arrays include, but are not limited to, those made using photolithography techniques (Affymetrix GeneChip™), spotting techniques (Synteni and others), printing techniques (Hewlett Packard and Rosetta), three dimensional "gel pad" arrays, etc. In one embodiment the ordered arrays include arrays that contain nucleic acids at known locations. That is, the adapters or capture probes described herein are immobilized at known locations on a substrate. By "known" locations is meant a site that is known or has been known.

In addition, adapters find use "liquid arrays". By "liquid arrays" is meant an array in solution for analysis, for example, by flow cytometry.

A preferred embodiment utilizes microspheres on a variety of substrates including fiber optic bundles, as are outlined in PCTs US98/21193, PCT US99/14387 and PCT US98/05025; WO98/50782; and U.S.S.N.s 09/287,573, 09/151,877, 09/256,943, 09/316,154, 60/119,323, 09/315,584; all of which are expressly incorporated by reference. While much of the discussion below is directed to the use of microsphere arrays on fiber optic bundles, any array format of nucleic acids on solid supports may be utilized.

Arrays containing from about 2 different bloactive agents (e.g. different beads, when beads are used) to many millions can be made, with very large arrays being possible. Generally, the array will comprise from two to as many as a billion or more, depending on the size of the beads and the substrate, as well as the end use of the array, thus very high density, high density, moderate density, low density and very low density arrays may be made. Preferred ranges for very high density arrays are from about 10,000,000 to about 2,000,000,000, with from about 100,000,000 to about 1,000,000 being preferred (all numbers being in square cm). High density arrays range about 100,000 to about 10,000,000, with from about 1,000,000 to about 5,000,000 being particularly preferred. Moderate density arrays range from about 10,000 to about 100,000 being particularly preferred, and from about 20,000 to about 5,000 being especially preferred. Low density arrays are generally less than 10,000, with from about 1,000 to about 5,000 being preferred. Very low density arrays are less than 1,000, with from about 10 to about 1000 being preferred, and from about 100 to about 500 being particularly preferred. In some embodiments, the compositions of the invention may

not be in array format; that is, for some embodiments, compositions comprising a single bioactiv agent may be made as well. In addition, in some arrays, multiple substrates may be used, either of different or identical compositions. Thus for example, large arrays may comprise a plurality of smaller substrates.

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fluoresce.

In addition, one advantage of the present compositions is that particularly through the use of fiber optic technology, extremely high density arrays can be made. Thus for example, because beads of 200 μ m or less (with beads of 200 nm possible) can be used, and very small fibers are known, it is possible to have as many as 40,000 or more (in some instances, 1 million) different elements (e.g. fibers and beads) in a 1 mm² fiber optic bundle, with densities of greater than 25,000,000 individual beads and fibers (again, in some instances as many as 50-100 million) per 0.5 cm² obtainable (4 million per square cm for 5 μ center-to-center and 100 million per square cm for 1 μ center-to-center).

By "substrate" or "solid support" or other grammatical equivalents herein is meant any material that can be modified to contain discrete individual sites appropriate for the attachment or association of beads and is amenable to at least one detection method. As will be appreciated by those in the art, the number of possible substrates is very large. Possible substrates include, but are not limited to, glass and modified or functionalized glass, plastics (including acrylics, polystyrene and copolymers of styrene and other materials, polypropylene, polyethylene, polybutylene, polyurethanes, Teflon, etc.), polysaccharides, nylon or nitrocellulose, resins, silica or silica-based materials including silicon and modified silicon, carbon, metals, inorganic glasses, plastics, optical fiber bundles, and a variety of other polymers. In general, the substrates allow optical detection and do not themselves appreciably

Generally the substrate is flat (planar), although as will be appreciated by those in the art, other configurations of substrates may be used as well; for example, three dimensional configurations can be used, for example by embedding the beads in a porous block of plastic that allows sample access to the beads and using a confocal microscope for detection. Similarly, the beads may be placed on the inside surface of a tube, for flow-through sample analysis to minimize sample volume. Preferred substrates include optical fiber bundles as discussed below, and flat planar substrates such as glass, polystyrene and other plastics and acrylics.

In a preferred embodiment, the substrate is an optical fiber bundle or array, as is generally described in U.S.S.N.s 08/944,850 and 08/519,062, PCT US98/05025, and PCT US98/09163, all of which are expressly incorporated herein by reference. Preferred embodiments utilize preformed unitary fiber optic arrays. By "preformed unitary fiber optic array" herein is meant an array of discrete individual fiber optic strands that are co-axially disposed and joined along their lengths. The fiber strands are generally individually clad. However, on thing that distinguished a preformed unitary array from other fiber optic formats is that the fibers are not individually physically manipulatable; that is, one strand

generally cannot be physically separated at any point along its length from another fiber strand.

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At least one surface of the substrate is modified to contain discrete, individual sites for later association of microspheres. These sites may comprise physically altered sites, i.e. physical configurations such as wells or small depressions in the substrate that can retain the beads, such that a microsphere can rest in the well, or the use of other forces (magnetic or compressive), or chemically altered or active sites, such as chemically functionalized sites, electrostatically altered sites, hydrophobically/ hydrophilically functionalized sites, spots of adhesive, etc.

The sites may be a pattern, i.e. a regular design or configuration, or randomly distributed. A preferred embodiment utilizes a regular pattern of sites such that the sites may be addressed in the X-Y coordinate plane. "Pattern" in this sense includes a repeating unit cell, preferably one that allows a high density of beads on the substrate. However, it should be noted that these sites may not be discrete sites. That is, it is possible to use a uniform surface of adhesive or chemical functionalities, for example, that allows the attachment of beads at any position. That is, the surface of the substrate is modified to allow attachment of the microspheres at individual sites, whether or not those sites are contiguous or non-contiguous with other sites. Thus, the surface of the substrate may be modified such that discrete sites are formed that can only have a single associated bead, or alternatively, the surface of the substrate is modified and beads may go down anywhere, but they end up at discrete sites.

In a preferred embodiment, the surface of the substrate is modified to contain wells, i.e. depressions in the surface of the substrate. This may be done as is generally known in the art using a variety of techniques, including, but not limited to, photolithography, stamping techniques, molding techniques and microetching techniques. As will be appreciated by those in the art, the technique used will depend on the composition and shape of the substrate.

In a preferred embodiment, physical alterations are made in a surface of the substrate to produce the sites. In a preferred embodiment, the substrate is a fiber optic bundle and the surface of the substrate is a terminal end of the fiber bundle, as is generally described in 08/818,199 and 09/151,877, both of which are hereby expressly incorporated by reference. In this embodiment, wells are made in a terminal or distal end of a fiber optic bundle comprising individual fibers. In this embodiment, the cores of the individual fibers are etched, with respect to the cladding, such that small wells or depressions are formed at one end of the fibers. The required depth of the wells will depend on the size of the beads to be added to the wells.

Generally in this embodiment, the microspheres are non-covalently associated in the wells, although the wells may additionally be chemically functionalized as is generally described below, cross-linking agents may be used, or a physical barrier may be used, i.e. a film or membrane over the beads.

In a preferred embodiment, the surface of the substrate is modified to contain chemically modified sites, that can be used to attach, either covalently or non-covalently, the microspheres of the invention to the discrete sites or locations on the substrate. "Chemically modified sites" in this context includes, but is not limited to, the addition of a pattern of chemical functional groups including amino groups. carboxy groups, oxo groups and thiol groups, that can be used to covalently attach microspheres, which generally also contain corresponding reactive functional groups; the addition of a pattern of adhesive that can be used to bind the microspheres (either by prior chemical functionalization for the addition of the adhesive or direct addition of the adhesive); the addition of a pattern of charged groups (similar to the chemical functionalities) for the electrostatic attachment of the microspheres, i.e. when the microspheres comprise charged groups opposite to the sites; the addition of a pattern of chemical functional groups that renders the sites differentially hydrophobic or hydrophilic, such that the addition of similarly hydrophobic or hydrophilic microspheres under suitable experimental conditions will result in association of the microspheres to the sites on the basis of hydroaffinity. For example, the use of hydrophobic sites with hydrophobic beads, in an aqueous system, drives the association of the beads preferentially onto the sites. As outlined above, "pattern" in this sense includes the use of a uniform treatment of the surface to allow attachment of the beads at discrete sites, as well as treatment of the surface resulting in discrete sites. As will be appreciated by those in the art, this may be accomplished in a variety of ways.

In a preferred embodiment, the compositions of the invention further comprise a population of microspheres. By "population" herein is meant a plurality of beads as outlined above for arrays.

Within the population are separate subpopulations, which can be a single microsphere or multiple identical microspheres. That is, in some embodiments, as is more fully outlined below, the array may contain only a single bead for each capture probe; preferred embodiments utilize a plurality of beads of each type.

By "microspheres" or "beads" or "particles" or grammatical equivalents herein is meant small discrete particles. The composition of the beads will vary, depending on the class of capture probe and the method of synthesis. Suitable bead compositions include those used in peptide, nucleic acid and organic moiety synthesis, including, but not limited to, plastics, ceramics, glass, polystyrene, methylstyrene, acrylic polymers, paramagnetic materials, thoria sol, carbon graphite, titanium dioxide, latex or cross-linked dextrans such as Sepharose, cellulose, nylon, cross-linked micelles and Teflon may all be used. "Microsphere Detection Guide" from Bangs Laboratories, Fishers IN is a helpful quide.

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The beads need not be spherical; irregular particles may be used. In addition, the beads may be porous, thus increasing the surface area of the bead available for either capture probe attachment or tag attachment. The bead sizes range from nanometers, i.e. 100 nm, to millimeters, i.e. 1 mm, with beads from about 0.2 micron to about 200 microns being preferred, and from about 0.5 to about 5

micron being particularly preferred, although in some embodiments smaller beads may be used.

It should be noted that a key component of this embodiment of the invention is the use of a substrate/bead pairing that allows th association or attachment of the beads at discrete sites on the surface of the substrate, such that the beads do not move during the course of the assay.

Each microsphere comprises a capture probe, although as will be appreciated by those in the art, there may be some microspheres which do not contain a capture probe, depending on the synthetic methods. Alternatively, some have more than one capture probe.

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Attachment of the nucleic acids may be done in a variety of ways, as will be appreciated by those in the art, including, but not limited to, chemical or affinity capture (for example, including the incorporation of derivatized nucleotides such as AminoLink or biotinylated nucleotides that can then be used to attach the nucleic acid to a surface, as well as affinity capture by hybridization), cross-linking, and electrostatic attachment, etc. In a preferred embodiment, affinity capture is used to attach the nucleic acids to the beads. For example, nucleic acids can be derivatized, for example with one member of a binding pair, and the beads derivatized with the other member of a binding pair. Suitable binding pairs are as described herein for IBL/DBL pairs. For example, the nucleic acids may be biotinylated (for example using enzymatic incorporate of biotinylated nucleotides, for by photoactivated cross-linking of biotin). Biotinylated nucleic acids can then be captured on streptavidincoated beads, as is known in the art. Similarly, other hapten-receptor combinations can be used, such as digoxigenin and anti-digoxigenin antibodies. Alternatively, chemical groups can be added in the form of derivatized nucleotides, that can them be used to add the nucleic acid to the surface.

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Preferred attachments are covalent, although even relatively weak interactions (i.e. non-covalent) can be sufficient to attach a nucleic acid to a surface, if there are multiple sites of attachment per each nucleic acid. Thus, for example, electrostatic interactions can be used for attachment, for example by having beads carrying the opposite charge to the bloactive agent.

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Similarly, affinity capture utilizing hybridization can be used to attach nucleic acids to beads. For example, as is known in the art, polyA+RNA is routinely captured by hybridization to oligo-dT beads; this may include oligo-dT capture followed by a cross-linking step, such as psoralen crosslinking). If the nucleic acids of interest do not contain a polyA tract, one can be attached by polymerization with terminal transferase, or via ligation of an oligoA linker, as is known in the art.

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Alternatively, chemical crosslinking may be done, for example by photoactivated crosslinking of thymidine to reactive groups, as is known in the art.

In a preferred embodiment, each bead comprises a single type of capture probe, although a plurality of

individual capture probes are preferably attached to ach bead. Similarly, pref rred embodiments utilize more than one microsphere containing a unique capture probe; that is, there is redundancy built into the system by the use of subpopulations of microspheres, each microsphere in the subpopulation containing the same capture probe.

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In an alternative embodiment, each bead comprises a plurality of different capture probes.

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As will be appreciated by those in the art, the capture probes may either be synthesized directly on the beads, or they may be made and then attached after synthesis. In a preferred embodiment, linkers are used to attach the capture probes to the beads, to allow both good attachment, sufficient flexibility to allow good interaction with the target molecule, and to avoid undesirable binding reactions.

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In a preferred embodiment, the capture probes are synthesized directly on the beads. As is known in the art, many classes of chemical compounds are currently synthesized on solid supports, such as peptides, organic moieties, and nucleic acids. It is a relatively straightforward matter to adjust the current synthetic techniques to use beads.

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In a preferred embodiment, the capture probes are synthesized first, and then covalently attached to the beads. As will be appreciated by those in the art, this will be done depending on the composition of the capture probes and the beads. The functionalization of solid support surfaces such as certain polymers with chemically reactive groups such as thiols, amines, carboxyls, etc. is generally known in the art. Accordingly, "blank" microspheres may be used that have surface chemistries that facilitate the attachment of the desired functionality by the user. Some examples of these surface chemistries for blank microspheres include, but are not limited to, amino groups including aliphatic and aromatic amines, carboxylic acids, aldehydes, amides, chloromethyl groups, hydrazide, hydroxyl groups,

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sulfonates and sulfates.

In a preferred embodiment the attachment of nucleic acids to substrates includes contacting the oligonucleotide and the solid support in the presence of high salt concentrations. As is appreciated by those skilled in the art, salt includes, but is not limited to sodium chloride, potassium chloride, calcium chloride, magnesium chloride, lithium chloride, rubidium chloride, cesium chloride, barium chloride and the like. In a preferred embodiment, salt as used in the invention includes sodium chloride.

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By high salt concentrations is meant salt that is more concentrated than about 0.1 M salt. In a preferred embodiment, by high salt concentrations is meant greater than about 0.2 M salt. In a particularly preferred embodiment, high salt concentrations include from about 0.5 to 3M salt, with about 1M to 2M being most preferred.

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By solid support or other grammatical equivalents herein is meant any material that can be modified

to contain oligonucleotides. As will be appreciated by those in the art, the number of possible solid supports is very large. Possible solid supports include, but are not limited to beads, glass and modified or functionalized glass, plastics (including acrylics, polystyrene and copolymers of styrene and other materials, polypropylene, polyethylene, polybutylene, polyurethanes, Teflon, etc.), polysaccharides, nylon or nitrocellulose, resins, silica or silica-based materials including silicon and modified silicon, carbon, metals, inorganic glasses, plastics, optical fiber bundles, and a variety of other polymers.

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Once formed, the support containing the oligonucleotides finds use in a variety of systems including decoding arrays as described in more detail in U.S.S.N. 09/344,526, and U.S.S.N. 09/574, 117, both of which are expressly incorporated herein by reference. In addition, the support containing the oligonucleotides finds use in microfluidic systems as described in U.S.S.N. 09/306,369 which is expressly incorporated herein by reference. In addition, the support containing the oligonucleotides finds use in composite array systems as described in U.S.S.N. 09/606,369, which is expressly incorporated herein by reference. In addition the support containing the oligonucleotides finds use in a variety of assays as outlined in more detail in U.S.S.N.s 09/513,362, 09/517,945, 09/535,854, 60/160,917, 60/180,810, 60/182,955, and 09/566,463, all of which are expressly incorporated herein by reference in their entirety. In addition, the support containing the oligonucleotides finds use in array based sensors as described in more detail in 09/287,573, 09/260,963, 09/450,829, 09/151,877, 09/187,289 and 08/519,062, all of which are expressly incorporated herein by reference in their entirety.

Accordingly the invention provides a method of attaching oligonucleotides to a solid support. The method includes contacting the oligonucleotides with the support in the presence of high salt as described herein. Once attached, as discussed in the examples, the attached oligonucleotides readily hybridize to targets, probes and the like. Attachment of crude oligonucleotides in the presence of high salt is as efficient as attaching purified oligonucleotides. Thus, the invention also contemplates a method of attachment of oligonucleotides to a solid support without prior purification of the oligonucleotides. Again, the method includes contacting the crude oligonucleotides with a solid support in the presence of high salt as described herein.

The capture probes are designed to be substantially complementary to the adapter sequences, to allow for a minimum of cross reactivity.

When microsphere arrays are used, an encoding/decoding system must be used. That is, since the beads are generally put onto the substrate randomly, there are several ways to correlate the functionality on the bead with its location, including the incorporation of unique optical signatures, generally fluorescent dyes, that could be used to identify the chemical functionality on any particular bead. This allows the synthesis of the candidate agents (i.e. compounds such as nucleic acids and

antibodies) to be divorced from their placement on an array, i.e. the candidate agents may be synthesized on the beads, and then the beads are randomly distributed on a patterned surface. Since the beads are first coded with an optical signature, this means that the array can later be "decoded", i.e. after the array is made, a correlation of the location of an individual site on the array with the bead or candidate agent at that particular site can be made. This means that the beads may be randomly distributed on the array, a fast and inexpensive process as compared to either the in situ synthesis or spotting techniques of the prior art.

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However, the drawback to these methods is that for a large array, the system requires a large number of different optical signatures, which may be difficult or time-consuming to utilize. Accordingly, the present invention provides several improvements over these methods, generally directed to methods of coding and decoding the arrays. That is, as will be appreciated by those in the art, the placement of the capture probes is generally random, and thus a coding/decoding system is required to identify the probe at each location in the array. This may be done in a variety of ways, as is more fully outlined below, and generally includes: a) the use a decoding binding ligand (DBL), generally directly labeled, that binds to either the capture probe or to identifier binding ligands (IBLs) attached to the beads; b) positional decoding, for example by either targeting the placement of beads (for example by using photoactivatible or photocleavable moieties to allow the selective addition of beads to particular locations), or by using either sub-bundles or selective loading of the sites, as are more fully outlined below; c) selective decoding, wherein only those beads that bind to a target are decoded; or d) combinations of any of these. In some cases, as is more fully outlined below, this decoding may occur for all the beads, or only for those that bind a particular target sequence. Similarly, this may occur either prior to or after addition of a target sequence. In addition, as outlined herein, the target sequences detected may be either a primary target sequence (e.g. a patient sample), or a reaction product from one of the methods described herein (e.g. an extended SBE probe, a ligated probe, a cleaved signal probe, etc.).

Once the identity (i.e. the actual agent) and location of each microsphere in the array has been fixed, the array is exposed to samples containing the target sequences, although as outlined below, this can be done prior to or during the analysis as well. The target sequences can hybridize (either directly or indirectly) to the capture probes as is more fully outlined below, and results in a change in the optical signal of a particular bead.

In the present invention, "decoding" may not rely on the use of optical signatures, but rather on the use of decoding binding ligands that are added during a decoding step. The decoding binding ligands will bind either to a distinct identifier binding ligand partner that is placed on the beads, or to the capture probe itself. In this embodiment the decoding binding ligand either is complementary to the capture probe. In this embodiment the decoding binding ligand has the signature of the adapter that also binds to the capture probe. In a preferred embodiment the decoder binding ligand is a nucleic acid

that has the sequence of at least one of the nucleic acids set forth in Table 1.

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The decoding binding ligands are either directly or indirectly labeled, and thus decoding occurs by detecting the presence of the label. By using pools of decoding binding ligands in a sequential fashion, it is possible to greatly minimize the number of required decoding steps.

In some embodiments, the microspheres may additionally comprise identifier binding ligands for use in certain decoding systems. By "identifier binding ligands" or "IBLs" herein is meant a compound that will specifically bind a corresponding decoder binding ligand (DBL) to facilitate the elucidation of the identity of the capture probe attached to the bead. That is, the IBL and the corresponding DBL form a binding partner pair. By "specifically bind" herein is meant that the IBL binds its DBL with specificity sufficient to differentiate between the corresponding DBL and other DBLs (that is, DBLs for other IBLs), or other components or contaminants of the system. The binding should be sufficient to remain bound under the conditions of the decoding step, including wash steps to remove non-specific binding. In some embodiments, for example when the IBLs and corresponding DBLs are proteins or nucleic acids, the dissociation constants of the IBL to its DBL will be less than about 10-4-10-8 M-1, with less than about 10-5 to 10-9 M-1 being preferred and less than about 10-7-10-9 M-1 being particularly preferred.

IBL-DBL binding pairs are known or can be readily found using known techniques. For example, when the IBL is a protein, the DBLs include proteins (particularly including antibodies or fragments thereof (FAbs, etc.)) or small molecules, or vice versa (the IBL is an antibody and the DBL is a protein). Metal ion-metal ion ligands or chelators pairs are also useful. Antigen-antibody pairs, enzymes and substrates or inhibitors, other protein-protein interacting pairs, receptor-ligands, complementary nucleic acids, and carbohydrates and their binding partners are also suitable binding pairs. Nucleic acid - nucleic acid binding proteins pairs are also useful. Similarly, as is generally described in U.S. Patents 5,270,163, 5,475,096, 5,567,588, 5,595,877, 5,637,459, 5,683,867,5,705,337, and related patents, hereby incorporated by reference, nucleic acid "aptamers" can be developed for binding to virtually any target; such an aptamer-target pair can be used as the IBL-DBL pair. Similarly, there is a wide body of literature relating to the development of binding pairs based on combinatorial chemistry methods.

In a preferred embodiment, the IBL is a molecule whose color or luminescence properties change in the presence of a selectively-binding DBL. For example, the IBL may be a fluorescent pH indicator whose emission intensity changes with pH. Similarly, the IBL may be a fluorescent ion indicator, whose emission properties change with ion concentration.

Alternatively, the IBL is a molecule whose color or luminescence properties change in the presence of various solvents. For example, the IBL may be a fluorescent molecule such as an ethidium salt whose

fluorescence intensity increases in hydrophobic environments. Similarly, the IBL may be a derivative of fluorescein whose color changes between aqueous and nonpolar solvents.

In on embodiment, the DBL may be attached to a bead, i.e. a "decoder bead", that may carry a label such as a fluorophore.

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In a preferred embodiment, the IBL-DBL pair comprise substantially complementary single-stranded nucleic acids. In this embodiment, the binding ligands can be referred to as "identifier probes" and "decoder probes". Generally, the identifier and decoder probes range from about 4 basepairs in length to about 1000, with from about 6 to about 100 being preferred, and from about 8 to about 40 being particularly preferred. What is important is that the probes are long enough to be specific, i.e. to distinguish between different IBL-DBL pairs, yet short enough to allow both a) dissociation, if necessary, under suitable experimental conditions, and b) efficient hybridization.

In a preferred embodiment, as is more fully outlined below, the IBLs do not bind to DBLs. Rather, the IBLs are used as identifier moieties ("IMs") that are identified directly, for example through the use of mass spectroscopy.

Alternatively, in a preferred embodiment, the IBL and the capture probe are the same moiety; thus, for example, as outlined herein, particularly when no optical signatures are used, the capture probe can serve as both the identifier and the agent. For example, in the case of nucleic acids, the bead-bound probe (which serves as the capture probe) can also bind decoder probes, to identify the sequence of the probe on the bead. Thus, in this embodiment, the DBLs bind to the capture probes.

In one embodiment, the microspheres may contain an optical signature. That is, as outlined in U.S.S.N.s 08/818,199 and 09/151,877, previous work had each subpopulation of microspheres comprising a unique optical signature or optical tag that is used to identify the unique capture probe of that subpopulation of microspheres; that is, decoding utilizes optical properties of the beads such that a bead comprising the unique optical signature may be distinguished from beads at other locations with different optical signatures. Thus the previous work assigned each capture probe a unique optical signature such that any microspheres comprising that capture probe are identifiable on the basis of the signature. These optical signatures comprised dyes, usually chromophores or fluorophores, that were entrapped or attached to the beads themselves. Diversity of optical signatures utilized different fluorochromes, different ratios of mixtures of fluorochromes, and different concentrations (intensities) of fluorochromes.

In a preferred embodiment, the present invention does not rely solely on the use of optical properties to decode the arrays. However, as will be appreciated by those in the art, it is possible in some embodiments to utilize optical signatures as an additional coding method, in conjunction with the

present system. Thus, for example, as is more fully outlined below, the size of the array may be effectively increased while using a single set of decoding moieties in several ways, one of which is the use of optical signatures one some beads. Thus, for example, using one "set" of decoding molecules, the use of two populations of beads, one with an optical signature and one without, allows the effective doubling of the array size. The use of multiple optical signatures similarly increases the possible size of the array.

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In a preferred embodiment, each subpopulation of beads comprises a plurality of different IBLs. By using a plurality of different IBLs to encode each capture probe, the number of possible unique codes is substantially increased. That is, by using one unique IBL per capture probe, the size of the array will be the number of unique IBLs (assuming no "reuse" occurs, as outlined below). However, by using a plurality of different IBLs per bead, n, the size of the array can be increased to 2", when the presence or absence of each IBL is used as the indicator. For example, the assignment of 10 IBLs per bead generates a 10 bit binary code, where each bit can be designated as "1" (IBL is present) or "0" (IBL is absent). A 10 bit binary code has 2¹0 possible variants. However, as is more fully discussed below, the size of the array may be further increased if another parameter is included such as concentration or intensity; thus for example, if two different concentrations of the IBL are used, then the array size increases as 3". Thus, in this embodiment, each individual capture probe in the array is assigned a combination of IBLs, which can be added to the beads prior to the addition of the capture probe, after, or during the synthesis of the capture probe, i.e. simultaneous addition of IBLs and capture probe components.

Alternatively, the combination of different IBLs can be used to elucidate the sequence of the nucleic acid. Thus, for example, using two different IBLs (IBL1 and IBL2), the first position of a nucleic acid can be elucidated: for example, adenosine can be represented by the presence of both IBL1 and IBL2; thymidine can be represented by the presence of IBL1 but not IBL2, cytosine can be represented by the presence of IBL2 but not IBL1, and guanosine can be represented by the absence of both. The second position of the nucleic acid can be done in a similar manner using IBL3 and IBL4; thus, the presence of IBL1, IBL2, IBL3 and IBL4 gives a sequence of AA; IBL1, IBL2, and IBL3 shows the sequence AT; IBL1, IBL3 and IBL4 gives the sequence TA, etc. The third position utilizes IBL5 and IBL6, etc. In this way, the use of 20 different identifiers can yield a unique code for every possible 10-mer.

In this way, a sort of "bar code" for each sequence can be constructed; the presence or absence of each distinct IBL will allow the identification of each capture probe.

In addition, the use of different concentrations or densities of IBLs allows a "reuse" of sorts. If, for example, the bead comprising a first agent has a 1X concentration of IBL, and a second bead comprising a second agent has a 10X concentration of IBL, using saturating concentrations of the

corresponding labelled DBL allows the user to distinguish between the two beads.

Once the microspheres comprising the capture probes are generated, they are added to the substrate to form an array. It should be noted that while most of the methods described herein add the beads to the substrate prior to the assay, the order of making, using and decoding the array can vary. For example, the array can be made, decoded, and then the assay done. Alternatively, the array can be made, used in an assay, and then decoded; this may find particular use when only a few beads need be decoded. Alternatively, the beads can be added to the assay mixture, i.e. the sample containing the target sequences, prior to the addition of the beads to the substrate; after addition and assay, the array may be decoded. This is particularly preferred when the sample comprising the beads is agitated or mixed; this can increase the amount of target sequence bound to the beads per unit time, and thus (in the case of nucleic acid assays) increase the hybridization kinetics. This may find particular use in cases where the concentration of target sequence in the sample is low; generally, for low concentrations, long binding times must be used.

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In general, the methods of making the arrays and of decoding the arrays is done to maximize the number of different candidate agents that can be uniquely encoded. The compositions of the invention may be made in a variety of ways. In general, the arrays are made by adding a solution or slurry comprising the beads to a surface containing the sites for attachment of the beads. This may be done in a variety of buffers, including aqueous and organic solvents, and mixtures. The solvent can evaporate, and excess beads are removed.

In a preferred embodiment, when non-covalent methods are used to associate the beads with the array, a novel method of loading the beads onto the array is used. This method comprises exposing the array to a solution of particles (including microspheres and cells) and then applying energy, e.g. agitating or vibrating the mixture. This results in an array comprising more tightly associated particles, as the agitation is done with sufficient energy to cause weakly-associated beads to fall off (or out, in the case of wells). These sites are then available to bind a different bead. In this way, beads that exhibit a high affinity for the sites are selected. Arrays made in this way have two main advantages as compared to a more static loading: first of all, a higher percentage of the sites can be filled easily, and secondly, the arrays thus loaded show a substantial decrease in bead loss during assays. Thus, in a preferred embodiment, these methods are used to generate arrays that have at least about 50% of the sites filled, with at least about 75% being preferred, and at least about 90% being particularly preferred. Similarly, arrays generated in this manner preferably lose less than about 20% of the beads during an assay, with less than about 10% being preferred and less than about 5% being particularly preferred.

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In this embodiment, the substrate comprising the surface with the discrete sites is immersed into a solution comprising the particles (beads, cells, etc.). The surface may comprise wells, as is described

herein, or other types of sites on a patterned surface such that there is a differential affinity for the sites. This differnetial affinity results in a competitive process, such that particles that will associate more tightly are selected. Preferably, the entire surface to be "loaded" with beads is in fluid contact with the solution. This solution is generally a slurry ranging from about 10,000:1 beads:solution (vol:vol) to 1:1. Generally, the solution can comprise any number of reagents, including aqueous buffers, organic solvents, salts, other reagent components, etc. In addition, the solution preferably comprises an excess of beads; that is, there are more beads than sites on the array. Preferred embodiments utilize two-fold to billion-fold excess of beads.

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The immersion can mimic the assay conditions; for example, if the array is to be "dipped" from above into a microtiter plate comprising samples, this configuration can be repeated for the loading, thus minimizing the beads that are likely to fall out due to gravity.

Once the surface has been immersed, the substrate, the solution, or both are subjected to a competitive process, whereby the particles with lower affinity can be disassociated from the substrate and replaced by particles exhibiting a higher affinity to the site. This competitive process is done by the introduction of energy, in the form of heat, sonication, stirring or mixing, vibrating or agitating the solution or substrate, or both.

A preferred embodiment utilizes agitation or vibration. In general, the amount of manipulation of the substrate is minimized to prevent damage to the array; thus, preferred embodiments utilize the agitation of the solution rather than the array, although either will work. As will be appreciated by those in the art, this agitation can take on any number of forms, with a preferred embodiment utilizing microtiter plates comprising bead solutions being agitated using microtiter plate shakers.

The agitation proceeds for a period of time sufficient to load the array to a desired fill. Depending on the size and concentration of the beads and the size of the array, this time may range from about 1 second to days, with from about 1 minute to about 24 hours being preferred.

It should be noted that not all sites of an array may comprise a bead; that is, there may be some sites on the substrate surface which are empty. In addition, there may be some sites that contain more than one bead, although this is not preferred.

In some embodiments, for example when chemical attachment is done, it is possible to attach the beads in a non-random or ordered way. For example, using photoactivatible attachment linkers or photoactivatible adhesives or masks, selected sites on the array may be sequentially rendered suitable for attachment, such that defined populations of beads are laid down.

The arrays of the present invention are constructed such that information about the identity of the

capture probe is built into the array, such that the random deposition of the beads in the fiber wells can be "decoded" to allow identification of the capture probe at all positions. This may be done in a variety of ways, and either b fore, during or after the use of the array to detect target molecules.

Thus, after the array is made, it is "decoded" in order to identify the location of one or more of the capture probes, i.e. each subpopulation of beads, on the substrate surface.

In a preferred embodiment, pyrosequencing techniques are used to decode the array, as is generally described in "Nucleic Acid Sequencing using Microsphere Arrays", filed October 22, 1999 (no U.S.S.N. received yet), hereby incorporated by reference.

In a preferred embodiment, a selective decoding system is used. In this case, only those microspheres exhibiting a change in the optical signal as a result of the binding of a target sequence are decoded. This is commonly done when the number of "hits", i.e. the number of sites to decode, is generally low. That is, the array is first scanned under experimental conditions in the absence of the target sequences. The sample containing the target sequences is added, and only those locations exhibiting a change in the optical signal are decoded. For example, the beads at either the positive or negative signal locations may be either selectively tagged or released from the array (for example through the use of photocleavable linkers), and subsequently sorted or enriched in a fluorescence-activated cell sorter (FACS). That is, either all the negative beads are released, and then the positive beads are either released or analyzed in situ, or alternatively all the positives are released and analyzed. Alternatively, the labels may comprise halogenated aromatic compounds, and detection of the label is done using for example gas chromatography, chemical tags, isotopic tags mass spectral tags.

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As will be appreciated by those in the art, this may also be done in systems where the array is not decoded; i.e. there need not ever be a correlation of bead composition with location. In this embodiment, the beads are loaded on the array, and the assay is run. The "positives", i.e. those beads displaying a change in the optical signal as is more fully outlined below, are then "marked" to distinguish or separate them from the "negative" beads. This can be done in several ways, preferably using fiber optic arrays. In a preferred embodiment, each bead contains a fluorescent dye. After the assay and the identification of the "positives" or "active beads", light is shown down either only the positive fibers or only the negative fibers, generally in the presence of a light-activated reagent (typically dissolved oxygen). In the former case, all the active beads are photobleached. Thus, upon non-selective release of all the beads with subsequent sorting, for example using a fluorescence activated cell sorter (FACS) machine, the non-fluorescent active beads can be sorted from the fluorescent negative beads. Alternatively, when light is shown down the negative fibers, all the negatives are non-fluorescent and the the postives ar fluorescent, and sorting can proceed. The characterization of the attached capture probe may be done directly, for example using mass

spectroscopy.

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Alternatively, the identification may occur through the use of identifier moieties ("IMs"), which are similar to IBLs but need not necessarily bind to DBLs. That is, rather than elucidate the structure of the capture probe directly, the composition of the IMs may serve as the identifier. Thus, for example, a specific combination of IMs can serve to code the bead, and be used to identify the agent on the bead upon release from the bead followed by subsequent analysis, for example using a gas chromatograph or mass spectroscope.

Alternatively, rather than having each bead contain a fluorescent dye, each bead comprises a non-fluorescent precursor to a fluorescent dye. For example, using photocleavable protecting groups, such as certain ortho-nitrobenzyl groups, on a fluorescent molecule, photoactivation of the fluorochrome can be done. After the assay, light is shown down again either the "positive" or the "negative" fibers, to distinguish these populations. The illuminated precursors are then chemically converted to a fluorescent dye. All the beads are then released from the array, with sorting, to form populations of fluorescent and non-fluorescent beads (either the positives and the negatives or vice versa).

In an alternate preferred embodiment, the sites of attachment of the beads (for example the wells) include a photopolymerizable reagent, or the photopolymerizable agent is added to the assembled array. After the test assay is run, light is shown down again either the "positive" or the "negative" fibers, to distinquish these populations. As a result of the irradiation, either all the positives or all the negatives are polymerized and trapped or bound to the sites, while the other population of beads can be released from the array.

In a preferred embodiment, the location of every capture probe is determined using decoder binding ligands (DBLs). As outlined above, DBLs are binding ligands that will either bind to identifier binding ligands, if present, or to the capture probes themselves, preferably when the capture probe is a nucleic acid or protein.

In a preferred embodiment, as outlined above, the DBL binds to the IBL.

In a preferred embodiment, the capture probes are single-stranded nucleic acids and the DBL is a substantially complementary single-stranded nucleic acid that binds (hybridizes) to the capture probe, termed a decoder probe herein. A decoder probe that is substantially complementary to each candidate probe is made and used to decode the array. In this embodiment, the candidate probes and the decoder probes should be of sufficient length (and the decoding step run under suitable conditions) to allow specificity; i.e. each candidate probe binds to its corresponding decoder probe with sufficient specificity to allow the distinction of each candidate probe.

In a preferred embodiment, the DBLs are either directly or indirectly labeled. In a preferred embodiment, the DBL is directly labeled, that is, the DBL comprises a label. In an alternate embodiment, the DBL is indirectly labeled; that is, a labeling binding ligand (LBL) that will bind to the DBL is used. In this embodiment, the labeling binding ligand-DBL pair can be as described above for IBL-DBL pairs.

Accordingly, the identification of the location of the individual beads (or subpopulations of beads) is done using one or more decoding steps comprising a binding between the labeled DBL and either the IBL or the capture probe (i.e. a hybridization between the candidate probe and the decoder probe when the capture probe is a nucleic acid). After decoding, the DBLs can be removed and the array can be used; however, in some circumstances, for example when the DBL binds to an IBL and not to the capture probe, the removal of the DBL is not required (although it may be desirable in some circumstances). In addition, as outlined herein, decoding may be done either before the array is used to in an assay, during the assay, or after the assay.

In one embodiment, a single decoding step is done. In this embodiment, each DBL is labeled with a unique label, such that the the number of unique tags is equal to or greater than the number of capture probes (although in some cases, "reuse" of the unique labels can be done, as described herein; similarly, minor variants of candidate probes can share the same decoder, if the variants are encoded in another dimension, i.e. in the bead size or label). For each capture probe or IBL, a DBL is made that will specifically bind to it and contains a unique tag, for example one or more fluorochromes. Thus, the identity of each DBL, both its composition (i.e. its sequence when it is a nucleic acid) and its label, is known. Then, by adding the DBLs to the array containing the capture probes under conditions which allow the formation of complexes (termed hybridization complexes when the components are nucleic acids) between the DBLs and either the capture probes or the IBLs, the location of each DBL can be elucidated. This allows the identification of the location of each capture probe; the random array has been decoded. The DBLs can then be removed, if necessary, and the target sample applied.

In a preferred embodiment, the number of unique labels is less than the number of unique capture probes, and thus a sequential series of decoding steps are used. In this embodiment, decoder probes are divided into n sets for decoding. The number of sets corresponds to the number of unique tags. Each decoder probe is labeled in n separate reactions with n distinct tags. All the decoder probes share the same n tags. The decoder probes are pooled so that each pool contains only one of the n tag versions of each decoder, and no two decoder probes have the same sequence of tags across all the pools. The number of pools required for this to be true is determined by the number of decoder probes and the n. Hybridization of each pool to the array generates a signal at every address. The sequential hybridization of each pool in turn will generate a unique, sequence-specific code for each candidate probe. This identifies the candidate probe at each address in the array. For example, if four

tags are used, then 4 X n sequential hybridizations can ideally distinguish 4ⁿ sequences, although in some cases more steps may be required. After the hybridization of each pool, the hybrids are denatured and the decoder probes removed, so that the probes ar rendered single-stranded for the next hybridization (although it is also possible to hybridize limiting amounts of target so that the available probe is not saturated. Sequential hybridizations can be carried out and analyzed by subtracting pre-existing signal from the previous hybridization).

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An example is illustrative. Assuming an array of 16 probe nucleic acids (numbers 1-16), and four unique tags (four different fluors, for example; labels A-D). Decoder probes 1-16 are made that correspond to the probes on the beads. The first step is to label decoder probes 1-4 with tag A, decoder probes 5-8 with tag B, decoder probes 9-12 with tag C, and decoder probes 13-16 with tag D. The probes are mixed and the pool is contacted with the array containing the beads with the attached candidate probes. The location of each tag (and thus each decoder and candidate probe pair) is then determined. The first set of decoder probes are then removed. A second set is added, but this time. decoder probes 1, 5, 9 and 13 are labeled with tag A, decoder probes 2, 6, 10 and 14 are labeled with tag B, decoder probes 3, 7, 11 and 15 are labeled with tag C, and decoder probes 4, 8, 12 and 16 are labeled with tag D. Thus, those beads that contained tag A in both decoding steps contain candidate probe 1; tag A in the first decoding step and tag B in the second decoding step contain candidate probe 2; tag A in the first decoding step and tag C in the second step contain candidate probe 3; etc. In one embodiment, the decoder probes are labeled in situ; that is, they need not be labeled prior to the decoding reaction. In this embodiment, the incoming decoder probe is shorter than the candidate probe, creating a 5' "overhang" on the decoding probe. The addition of labeled ddNTPs (each labeled with a unique tag) and a polymerase will allow the addition of the tags in a sequence specific manner, thus creating a sequence-specific pattern of signals. Similarly, other modifications can be done, including ligation, etc.

In addition, since the size of the array will be set by the number of unique decoding binding ligands, it is possible to "reuse" a set of unique DBLs to allow for a greater number of test sites. This may be done in several ways; for example, by using some subpopulations that comprise optical signatures. Similarly, the use of a positional coding scheme within an array; different sub-bundles may reuse the set of DBLs. Similarly, one embodiment utilizes bead size as a coding modality, thus allowing the reuse of the set of unique DBLs for each bead size. Alternatively, sequential partial loading of arrays with beads can also allow the reuse of DBLs. Furthermore, "code sharing" can occur as well.

In a preferred embodiment, the DBLs may be reused by having some subpopulations of beads comprise optical signatures. In a preferred embodiment, the optical signature is generally a mixture of reporter dyes, preferably flourescent. By varying both the composition of the mixture (i.e. the ratio of one dye to another) and the concentration of the dye (leading to differences in signal intensity), matrices of unique optical signatures may be generated. This may be done by covalently attaching the

dyes to the surfac of the beads, or alternatively, by entrapping the dye within the bead.

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In a preferred embodiment, the encoding can be accomplished in a ratio of at least two dyes, although more encoding dimensions may be added in the size of the beads, for example. In addition, the labels are distinguishable from one another; thus two different labels may comprise different molecules (i.e. two different fluors) or, alternatively, one label at two different concentrations or intensity.

In a preferred embodiment, the dyes are covalently attached to the surface of the beads. This may be done as is generally outlined for the attachment of the capture probes, using functional groups on the surface of the beads. As will be appreciated by those in the art, these attachments are done to minimize the effect on the dye.

In a preferred embodiment, the dyes are non-covalently associated with the beads, generally by entrapping the dyes in the pores of the beads.

Additionally, encoding in the ratios of the two or more dyes, rather than single dye concentrations, is preferred since it provides insensitivity to the intensity of light used to interrogate the reporter dye's signature and detector sensitivity.

In a preferred embodiment, a spatial or positional coding system is done. In this embodiment, there are sub-bundles or subarrays (i.e. portions of the total array) that are utilized. By analogy with the telephone system, each subarray is an "area code", that can have the same tags (i.e. telephone numbers) of other subarrays, that are separated by virtue of the location of the subarray. Thus, for example, the same unique tags can be reused from bundle to bundle. Thus, the use of 50 unique tags in combination with 100 different subarrays can form an array of 5000 different capture probes. In this embodiment, it becomes important to be able to identify one bundle from another; in general, this is done either manually or through the use of marker beads, i.e. beads containing unique tags for each subarray.

In alternative embodiments, additional encoding parameters can be added, such as microsphere size. For example; the use of different size beads may also allow the reuse of sets of DBLs; that is, it is possible to use microspheres of different sizes to expand the encoding dimensions of the microspheres. Optical fiber arrays can be fabricated containing pixels with different fiber diameters or cross-sections; alternatively, two or more fiber optic bundles, each with different cross-sections of the individual fibers, can be added together to form a larger bundle; or, fiber optic bundles with fiber of the same size cross-sections can be used, but just with different sized beads. With different diameters, the largest wells can be filled with the largest microspheres and then moving onto progressively smaller microspheres in the smaller wells until all size wells are then filled. In this manner, the same dve ratio could be used to encode microspheres of different sizes thereby expanding the number of

different oligonucleotide sequences or chemical functionalities present in the array. Although outlined for fiber optic substrates, this as well as the other methods outlined herein can be used with other substrates and with other rattachment modalities as well.

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In a preferred embodiment, the coding and decoding is accomplished by sequential loading of the microspheres into the array. As outlined above for spatial coding, in this embodiment, the optical signatures can be "reused". In this embodiment, the library of microspheres each comprising a different capture probe (or the subpopulations each comprise a different capture probe), is divided into a plurality of sublibraries; for example, depending on the size of the desired array and the number of unique tags, 10 sublibraries each comprising roughly 10% of the total library may be made, with each sublibrary comprising roughly the same unique tags. Then, the first sublibrary is added to the fiber optic bundle comprising the wells, and the location of each capture probe is determined, generally through the use of DBLs. The second sublibrary is then added, and the location of each capture probe is again determined. The signal in this case will comprise the signal from the "first" DBL and the "second" DBL; by comparing the two matrices the location of each bead in each sublibrary can be determined. Similarly, adding the third, fourth, etc. sublibraries sequentially will allow the array to be filled.

In a preferred embodiment, codes can be "shared" in several ways. In a first embodiment, a single code (i.e. IBL/DBL pair) can be assigned to two or more agents if the target sequences different sufficiently in their binding strengths. For example, two nucleic acid probes used in an mRNA quantitation assay can share the same code if the ranges of their hybridization signal intensities do not overlap. This can occur, for example, when one of the target sequences is always present at a much higher concentration than the other. Alternatively, the two target sequences might always be present at a similar concentration, but differ in hybridization efficiency.

Alternatively, a single code can be assigned to multiple agents if the agents are functionally equivalent. For example, if a set of oligonucleotide probes are designed with the common purpose of detecting the presence of a particular gene, then the probes are functionally equivalent, even though they may differ in sequence. Similarly, an array of this type could be used to detect homologs of known genes. In this embodiment, each gene is represented by a heterologous set of probes, hybridizing to different regions of the gene (and therefore differing in sequence). The set of probes share a common code. If a homolog is present, it might hybridize to some but not all of the probes. The level of homology might be indicated by the fraction of probes hybridizing, as well as the average hybridization intensity. Similarly, multiple antibodies to the same protein could all share the same code.

In a preferred embodiment, decoding of self-assembled random arrays is done on the bases of pH titration. In this embodiment, in addition to capture probes, the beads comprise optical signatures, wherein the optical signatures are generated by the use of pH-responsive dyes (sometimes r ferred to

herein as "ph dyes") such as fluorophores. This embodiment is similar to that outlined in PCT US98/05025 and U.S.S.N. 09/151,877, both of which are expressly incorporated by reference, except that the dyes used in the present ivention exhibits changes in fluorescence intensity (or other properties) when the solution pH is adjusted from below the pKa to above the pKa (or vice versa). In a preferred embodiment, a set of pH dyes are used, each with a different pKa, preferably separated by at least 0.5 pH units. Preferred embodiments utilize a pH dye set of pKa's of 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0, 10.5, 11, and 11.5. Each bead can contain any subset of the pH dyes, and in this way a unique code for the capture probe is generated. Thus, the decoding of an array is achieved by titrating the array from pH 1 to pH 13, and measuring the fluorescence signal from each bead as a function of solution pH.

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Thus, the present invention provides array compositions comprising a substrate with a surface comprising discrete sites. A population of microspheres is distributed on the sites, and the population comprises at least a first and a second subpopulation. Each subpopulation comprises a capture probe, and, in addition, at least one optical dye with a given pKa. The pKas of the different optical dyes are different.

In a preferred embodiment, "random" decoding probes can be made. By sequential hybridizations or the use of multiple labels, as is outlined above, a unique hybridization pattern can be generated for each sensor element. This allows all the beads representing a given clone to be identified as belonging to the same group. In general, this is done by using random or partially degenerate decoding probes, that bind in a sequence-dependent but not highly sequence-specific manner. The process can be repeated a number of times, each time using a different labeling entity, to generate a different pattern of singals based on quasi-specific interactions. In this way, a unique optical signature is eventually built up for each sensor element. By applying pattern recognition or clustering algorithms to the optical signatures, the beads can be grouped into sets that share the same signature (i.e. carry the same probes).

In order to identify the actual sequence of the clone itself, additional procedures are required; for example, direct sequencing can be done, or an ordered array containing the clones, such as a spotted cDNA array, to generate a "key" that links a hybridization pattern to a specific clone.

Alternatively, clone arrays can be decoded using binary decoding with vector tags. For example, partially randomized oligos are cloned into a nucleic acid vector (e.g. plasmid, phage, etc.). Each oligonucleotide sequence consists of a subset of a limited set of sequences. For example, if the limites set comprises 10 sequences, each oligonucleotide may have some subset (or all of the 10) sequences. Thus each of the 10 sequences can be present or absent in the oligonucleotide. Therefore, there are 2¹⁰ or 1,024 possible combinations. The sequences may overlap, and minor variants can also be represented (e.g. A, C, T and G substitutions) to increase the number of possible

combinations. A nucleic acid library is cloned into a vector containing the random code sequences. Alternatively, other methods such as PCR can be used to add the tags. In this way it is possible to use a small number of oligo decoding probes to decode an array of clones.

As will be appreciated by those in the art, the systems of the invention may take on a large number of different configurations, as is generally depicted in the Figures. In general, there are three types of systems that can be used: (1) "non-sandwich" systems (also referred to herein as "direct" detection) in which the target sequence itself is labeled with detectable labels (again, either because the primers comprise labels or due to the incorporation of labels into the newly synthesized strand); (2) systems in which label probes directly bind to the target analytes; and (3) systems in which label probes are indirectly bound to the target sequences, for example through the use of amplifier probes.

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Detection of the reactions of the invention, including the direct detection of products and indirect detection utilizing label probes (i.e. sandwich assays), is preferably done by detecting assay complexes comprising detectable labels, which can be attached to the assay complex in a variety of ways.

In a preferred embodiment, an array of different and usually artificial capture probes are made; that is, the capture probes do not have complementarity to known target sequences. The adapter sequences can then be added to any target sequences, or soluble capture extender probes are made; this allows the manufacture of only one kind of array, with the user able to customize the array through the use of adapter sequences or capture extender probes. This then allows the generation of customized soluble probes, which as will be appreciated by those in the art is generally simpler and less costly.

When capture extender probes are used, in one embodiment, microsphere arrays containing a single type of capture probe are made; in this embodiment, the capture extender probes are added to the beads prior to loading on the array. The capture extender probes may be additionally fixed or crosslinked, as necessary.

Accordingly, the present invention provides compositions and methods for detecting the presence or absence of target analytes, including nucleic acid sequences, in a sample. As will be appreciated by those in the art, the sample solution may comprise any number of things, including, but not limited to, bodily fluids (including, but not limited to, blood, urine, serum, lymph, saliva, anal and vaginal secretions, perspiration and semen, of virtually any organism, with mammallan samples being preferred and human samples being particularly preferred); environmental samples (including, but not limited to, air, agricultural, water and soil samples); biological warfare agent samples; research samples (i.e. in the case of nucleic acids, the sample may be the products of an amplification reaction, including both target and signal amplification); purified samples, such as purified genomic DNA, RNA, proteins, etc.; raw samples (bacteria, virus, genomic DNA, etc.; As will be appreciated by those in the

art, virtually any exp rimental manipulation may have been done on the sample.

The present invention provides compositions and methods for detecting the presenc or absence of target nucleic acid sequences in a sample.

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In a preferred embodiment, several levels of redundancy are built into the arrays of the invention. Building redundancy into an array gives several significant advantages, including the ability to make quantitative estimates of confidence about the data and significant increases in sensitivity. Thus, preferred embodiments utilize array redundancy. As will be appreciated by those in the art, there are at least two types of redundancy that can be built into an array: the use of multiple identical sensor elements (termed herein "sensor redundancy"), and the use of multiple sensor elements directed to the same target analyte, but comprising different chemical functionalities (termed herein "target redundancy"). For example, for the detection of nucleic acids, sensor redundancy utilizes of a plurality of sensor elements such as beads comprising identical binding ligands such as probes. Target redundancy utilizes sensor elements with different probes to the same target: one probe may span the first 25 bases of the target, a second probe may span the second 25 bases of the target, etc. By building in either or both of these types of redundancy into an array, significant benefits are obtained. For example, a variety of statistical mathematical analyses may be done.

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In addition, while this is generally described herein for bead arrays, as will be appreciated by those in the art, this techniques can be used for any type of arrays designed to detect target analytes. Furthermore, while these techniques are generally described for nucleic acid systems, these techniques are useful in the detection of other binding ligand/target analyte systems as well.

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In a preferred embodiment, sensor redundancy is used. In this embodiment, a plurality of sensor elements, e.g. beads, comprising identical bioactive agents are used. That is, each subpopulation comprises a plurality of beads comprising identical bioactive agents (e.g. binding ligands). By using a number of identical sensor elements for a given array, the optical signal from each sensor element can be combined and any number of statistical analyses run, as outlined below. This can be done for a variety of reasons. For example, in time varying measurements, redundancy can significantly reduce the noise in the system. For non-time based measurements, redundancy can significantly increase the confidence of the data.

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In a preferred embodiment, a plurality of identical sensor elements are used. As will be appreciated by those in the art, the number of identical sensor elements will vary with the application and use of the sensor array. In general, anywhere from 2 to thousands may be used, with from 2 to 100 being preferred, 2 to 50 being particularly preferred and from 5 to 20 being especially preferred. In general, preliminary results indicate that roughly 10 beads gives a sufficient advantage, although for some applications, mor identical sensor elements can be used.

Once obtained, the optical response signals from a plurality of sensor beads within each bead subpopulation can be manipulated and analyzed in a wide variety of ways, including baseline adjustment, averaging, standard deviation analysis, distribution and cluster analysis, confidence interval analysis, mean testing, etc.

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In a preferred embodiment, the first manipulation of the optical response signals is an optional baseline adjustment. In a typical procedure, the standardized optical responses are adjusted to start at a value of 0.0 by subtracting the integer 1.0 from all data points. Doing this allows the baseline-loop data to remain at zero even when summed together and the random response signal noise is canceled out. When the sample is a fluid, the fluid pulse-loop temporal region, however, frequently exhibits a characteristic change in response, either positive, negative or neutral, prior to the sample pulse and often requires a baseline adjustment to overcome noise associated with drift in the first few data points due to charge buildup in the CCD camera. If no drift is present, typically the baseline from the first data point for each bead sensor is subtracted from all the response data for the same bead. If drift is observed, the average baseline from the first ten data points for each bead sensor is substracted from the all the response data for the same bead. By applying this baseline adjustment, when multiple bead responses are added together they can be amplified while the baseline remains at zero. Since all beads respond at the same time to the sample (e.g. the sample pulse), they all see the pulse at the exact same time and there is no registering or adjusting needed for overlaying their responses. In addition, other types of baseline adjustment may be done, depending on the requirements and output of the system used.

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Once the baseline has been adjusted, a number of possible statistical analyses may be run to generate known statistical parameters. Analyses based on redundancy are known and generally described in texts such as Freund and Walpole, Mathematical Statistics, Prentice Hall, Inc. New Jersey, 1980, hereby incorporated by reference in its entirety.

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In a preferred embodiment, signal summing is done by simply adding the intensity values of all responses at each time point, generating a new temporal response comprised of the sum of all bead responses. These values can be baseline-adjusted or raw. As for all the analyses described herein, signal summing can be performed in real time or during post-data acquisition data reduction and analysis. In one embodiment, signal summing is performed with a commercial spreadsheet program (Excel, Microsoft, Redmond, WA) after optical response data is collected.

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Methods for signal summing and analyses are included in U.S.S.N. 08/944,850, filed October 6, 1997; 09/287,573, filed April 6, 1999; and 60/238,866, filed October 6, 2000; an PCT Nos. US98/21193, filed October 6, 1998; and US00/09183, filed April 6, 2000.

Once made, the methods and compositions of the invention find use in a number of applications. In a

preferred embodiment, the compositions are used to probe a sample solution for the presence or absence of a target sequence, including the quantification of the amount of target sequence present. The compositions and methods find utility in the detection of genotyping assays and sequencing assays, and in all sorts of target analyte assays, including immunoassays.

For SNP analysis, the ratio of different labels at a particular location on the array indicates the homozygosity or heterozygosity of the target sample, assuming the same concentration of each readout probe is used. Thus, for example, assuming a first readout probe comprising a first base at the readout position with a first detectable label and a second readout probe comprising a second base at the readout position with a second detectable label, equal signals (roughly 1:1 (taking into account the different signal intensities of the different labels, different hybridization efficiencies, and other reasons)) of the first and second labels indicates a heterozygote. The absence of a signal from the first label (or a ratio of approximately 0:1) indicates a homozygote of the second detection base; the absence of a signal from the second label (or a ratio of approximately 1:0) indicates a homozygote for the first detection base. As is appreciated by those in the art, the actual ratios for any particular system are generally determined empirically.

Generally, a sample containing a target analyte (whether for detection of the target analyte or screening for binding partners of the target analyte) is added to the array, under conditions suitable for binding of the target analyte to at least one of the capture probes, i.e. generally physiological conditions. The presence or absence of the target analyte is then detected. As will be appreciated by those in the art, this may be done in a variety of ways, generally through the use of a change in an optical signal. This change can occur via many different mechanisms. A few examples include the binding of a dye-tagged analyte to the bead, the production of a dye species on or near the beads, the destruction of an existing dye species, a change in the optical signature upon analyte interaction with dye on bead, or any other optical interrogatable event.

In a preferred embodiment, the change in optical signal occurs as a result of the binding of a target analyte that is labeled, either directly or indirectly, with a detectable label, preferably an optical label such as a fluorochrome. Thus, for example, when a proteinaceous target analyte is used, it may be either directly labeled with a fluor, or indirectly, for example through the use of a labeled antibody. Similarly, nucleic acids are easily labeled with fluorochromes, for example during PCR amplification as is known in the art. Alternatively, upon binding of the target sequences, a hybridization indicator may be used as the label. Hybridization indicators preferentially associate with double stranded nucleic acid, usually reversibly. Hybridization indicators include intercalators and minor and/or major groove binding moieties. In a preferred embodiment, intercalators may be used; since intercalation generally only occurs in the presence of double stranded nucleic acid, only in the presence of target hybridization will the label light up. Thus, upon binding of the target analyte to a capture probe, ther is a new optical signal generated at that site, which then may be detected.

Alternatively, in some cases, as discussed above, the target analyte such as an enzyme generates a species that is either directly or indirectly optical detectable.

Furthermor, in some embodiments, a change in the optical signature may be the basis of the optical signal. For example, the interaction of some chemical target analytes with some fluorescent dyes on the beads may alter the optical signature, thus generating a different optical signal.

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As will be appreciated by those in the art, in some embodiments, the presence or absence of the target analyte may be done using changes in other optical or non-optical signals, including, but not limited to, surface enhanced Raman spectroscopy, surface plasmon resonance, radioactivity, etc.

The assays may be run under a variety of experimental conditions, as will be appreciated by those in the art. A variety of other reagents may be included in the screening assays. These include reagents like salts, neutral proteins, e.g. albumin, detergents, etc which may be used to facilitate optimal protein-protein binding and/or reduce non-specific or background interactions. Also reagents that otherwise improve the efficiency of the assay, such as protease inhibitors, nuclease inhibitors, anti-microbial agents, etc., may be used. The mixture of components may be added in any order that provides for the requisite binding. Various blocking and washing steps may be utilized as is known in the art.

The following examples serve to more fully describe the manner of using the above-described invention, as well as to set forth the best modes contemplated for carrying out various aspects of the invention. It is understood that these examples in no way serve to limit the true scope of this invention, but rather are presented for illustrative purposes. All references cited herein are incorporated by reference in their entirety.

Examples

Example 1

Immobilization of Crude Oligonucleotides to a Solid Support

- Introduce chemical functional group (such as -NH2, -COOH, -NCO, -NHS, -SH, -CHO, etc.) onto solid support.
 - 2. Activate the functional group before oligonucleotide attachment.
 - 3. 5'-terminal modified oligonucleotide attachment.

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Crude Oligonucleotides were attached to supports and compared to results from attachment of purified oligonucleotides. As demonstrated in Figure 3, in the presence of 2M salt, crude oligonucleotides were immobilized as efficiently as purified oligonucleotides.

- 15 IN addition, the improved attachment of oligonucleotides to a solid support in the presence of increased salt was sequence and length independent. Thus, the method finds use in attachment of all oligonucleotides to a solid support (see Figure 4).
- In addition, when 0.5 M to 3 M NaCl was used for attachment of oligonucleotides, non-purified oligonucleotides were attached with comparable efficiency when compared to purified oligonucleotides (see Figure 5).

TABLE 1

Seq.ID.No.	Decoder (5'-3')		
17	GGCTGGTTCGGCCCGAAAGCTTAG		
18	GTTCCCAGTGAAGCTGCGATCTGG		
19	TACTTGGCATGGAATCCCTTACGC		
20	ACTAGCATATTTCAGGGCACCGGC		
21	GAACGGTCAATGAACCCGCTGTGA		
22	GCGGCCTTGGTTCAATATGAATCG		
23	GATCGTTAGAGGGACCTTGCCCGA		
24	TGGACCTAGTCCGGCAGTGACGAA		
25	ATAAACTACCCAGGACGGGCGGAA		
26	CATCGGTTCGCGCCAATCCAGATA		
27	GTCGGGCATAGAGCCGACCACCCT		
28	CTTGGGTCATGATTCACCGTGCTA		
29	TGCCTAACGTGCTAATCAGCAGCG		
30	CGCATGTTGGAGCATATGCCCTGA		
31	AGCCACTGCATCAGTGCTGTTCAA		
32	GGTTGTTTTGAGGCGTCCCACACT		
33	TCGACCAAGAGCAAGGGCGGACCA		
34	GACATCGCTATTGCGCATGGATCA		
35	GAAATACGAAGTCTGCGGGAGTCG		
36	TGTCATGAATGATTGATCGCGCGA		
37	ATATCGGGATTCGTTCCCGGTGAA		
38	GCGAGCGTACCGAAGGGCCTAGAA		
39	TTACCGGCAGCGGACTTCCGAATT		
40	GTAATCGAGAGCTGCGCGCCGTCT		
41	TCCCTGAGGTCGGAAGCTTCCGAC		
42	CCTGTTAGCGTAGGCGAGTCGATC		
43	TAGCGGACCGGCAGAATGAGTTCC		
44	GGTACATGCACTACGCGCACTCGG		
45	AATTCATCTCGGACTCCCGCGGTA		
46	GCCAAATCTGGATTGGCAGGAATG		
47	TGCATTTTCGGTTGAGGCACATCC		
48	CCGCTCAATTCACCATGCTTCGCT		
49 ·	CTCGGAAAGGTGCAACTTTGGTGT		
50	AATTCGACCAGCAGAACGTCCCAT		
51	GCCAGAGTCTCAACCTCACGGGAT		
52	CCAACAACTGGAACGGGAACCCGC		
-53	GAGAACTGATCGCTGAGGGGCATG		
54	GGCACACTAGACTTGTGGCACCGA		

	55	CTTGGGCAAACGCTTCAGCCACAA
	56	TCACATCCAAATATGGTCCGCGAA
	57	GTCTGCCGGTGTGACCGCTTCATT
·	58	CATCGCAGAGCATAAACACCCTCA
5	59	GTTGGTATCTATGGCAGAGGCGGA
	60	ACGAGGTGCCGCTGAGGTTCCATT
	61	GGAATGAGTGGACCCAGGCACATT
	62	TGTCAATATGCGTCCGTGTCGTCT
	63	TGATGAGCCTCAGGGTACGAGGCA
10 .	64	CACCGCGGTGTTCCTACAGAATGA
	65	TTGTTGCCAATGGTGTCCGCTCGG
	66	TTAACCTGCGTCTGCCCCTTTCCT
	67	AGGCGCGTTCCTGCCTTAGTGACG
	68	TAGGGCGATGGCACGAAGCTTCAA
15	69	TGCATAGAGCCAAAGTCGGCGATG
	70	TTGAGAGGCAGGTGGCCACACGGA
	71	TCCGCATTGTGAGAAAAAACGAGC
	72	GGCGGTTTCCGTAGCTATAGGTGC
	73	GGTGAAAATTTCGTAGCCACGGGC
20	74	CCGACGGAGGATGAAGACAATCAC
	75	CCAGTTTGGCCCAATTCGCCAAAA
	76	GGATCTATTAGGCCGTGCGCACAG
	77	CGGATGTCACCGTTTGGACTTTCA
	78	ATCGCAAATCCTGCTCGTCCCTAA
25	79	CAGGGCATGCAATAATCGAGGTTC
	80	CATGCGTTGATATATGGGCCCAAG
	81	CAGCTGCAGCTTGTGACCAACCAC
	82	TTGTATGTCTGCCGACCGGCGACC
	83	GATGGCGCCGTTGATAGGTATGG
30	84	ATGAGAATCGCCGGCAATCTGCTA
	85	ATTTGCACTGACCGCAGGCTCGTG
	86	CAGGGAGAACGGTTAAGTTCCCGT
	87	AGGCCGGCGATCGAGGAGTTTGGT
•	88	ACACGGTGGTCTCTGATAGCGACC
35	89	GTGCAACGCCGAGGACTTCCATCA
	90	TCGGTGCCTGATAGCCATTCCGAT
	91	TGAAATACCACACAGCCAATTGGC
1	92	GCATCGTGTACATGACTGCCGCGA
	93	CAGTGTTCTAACGGCGCGCGTGAA
40	94	CGCTTGCAACGTTGCACCTACTCT
	95	CGAAAAACTAGTGGGCTCGCCGCG
	96	CTTTCAGGGGAACTGCCGGAGTCG

	97	TTGTGGCCTTCTTGTAAAGGCACG
	98	TCCACGAACGGCGACCCGTTGTCT
	99	CGACCTTGCACGAAACCTAACGAG
	100	GTGCAGCTTCACGAGCCAGCCTGA
5	101	CGCTTTCGTGCGAATAGACGATGA
	102	TGCGCTTACAGGCTCCTAGTGGTC
	103	CACGCGCTTAGTCGCGATCGCATA
	104	CGGAGGGAGGAGCTAGCCTTCGA
,	105	GCATCCGGCCTGTTGATGACGCCT
10	106	AGGCCAATCGATCTTATTGCCGAG
	107	CCTTCCAATGATTGCATACGCCCA
	108	AACACTTGATCAGGCGGGTCGTCT
	109	TGGAATCAAGGCCGTAAAGGACAG
•	110	GCTCCCGTAACCTGTCCACCAGTG
15	111	AGTGGTGAATGGCCGCTACCCTGA
	112	TGTTGAAGCGAGCTAAAACGGCCA
	113	CAGCGCTCCAGAATTGACAGCAAT
	114	AAGGTGGTGCCATTCATTTGGCTA
	115	CGTTAAACCGCAATCCGTTCGGCT
20	116	TGTCTTCCACCTCGAAGGTTTCCA
	117	CACGAGATACCGGCGTAAGGGTGG
	118	CTACGGCAAACGTGTGGAATGGGT
	119	GTAGGGCGATGACGGGCGAACTAC
	120	AATCGACCTCCGCACACATTCGCA
25	121	GAGTCAGCATGGCGGCGGAGATTC
	122	AGATAAAGACGCTGGCAACACGGG
	123	GGTACCTCAACGCGAACCACTTGT
	124	AAGCGATGGCTACCCAAGAGCGAT
	125	AGAGCTTATGCAGAACCAGGCGCC
30	126	ATCGGTCTCACGCAGGGTTGGATA
	127	TAGGTTGCCCGCCAGAAGAACAT
	128	CGGTGCTGTTGCAAAAGCCTGTAG
	129	TGATGAAAGTTTGCGGCAGGACAC
	130	GTTGAGTGCAGGATAG
35	131	AACATTGCGCGGTCCACCAGGGTT
	132	GGGCAGTTAGAGAGGGCCAGAAGT
	133	TCGAGCTGGTCCCCGTGAACGTGT
·	134	GTCTTGGGGGCCGCTTAGTGAAAA
	135	ACTGTTGGCTTGCTCATGTCCA
40	136	AGGACCATTCGGAAGGCGAAGATA
	137	CTTGGGAGGCATCCGCTATAAGGA
	138	AATAAACGGAACGCACCGCTACAG

	139	TTGTACGTGCGGTCCCCATAAGCA
	140	CGCACCAAACTGAGTTTCCCAGAC
	141	ACCTGATCGTTCCCCTATTGGGAA
	142	GGAACAGAGGCGAGGGGACTGAGC
5	143	CCCTGCCTTGGCGTGTCGGCTTAT
	144	ACTCTGACACGCCAACTCCGGAAG
	145	CTGACGGTTTTCATTCGGCGTGCC
	146	TGCGGTGGTTCATTGGAGCTGGCC
	147	GCATGGCCAACTAGTGACTCGCAA
10	148	AGGCCGTAAAGCGAATCTCACCTG
	149	CGAATATTATGCCGAGAATCCGCG
	150	ACAGACGAGCTCCCAACCACATGA
	151	GGACGGTTTGTGCTGGATTGTCTG
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15	153	GATGGCCTATTCGGAGATCGGGCC
	154	GATCCAGTAGGCAGCTTCATCCCA
	155	AATAACTCGCGCGGGTATGCTTCT
	156	GGAGGAGGTTTGTCTCGGAAAGCA
	157	CTTTGGTATGGCACATGCTGCCCG
20	158	AGAAAGGCTCGAGCAACGGGAACT
	159	AATCTACCGCACTGGTCCGCAAGT
	160	CGTGGCGGCCACAGTTTTTGGAGG
	161	TTGCAGTTCAATCCATACGCACGT
	162	GGCCCAAAGCCCCAGACCATTTTA
25	163	CGCCTGTCTTTGTCTCCGGACAAT
	164	TGAGGCAACAGGGGCCAAAAACTA
	165	AGCGGAAGTAGTCCTCGGCTCGTC
	166	GGCCCCAAGGCTTAGAGATAGTGG
	167	GCACGTGAAGTTTAACCGCGATTC
30	168	AGCGGCAGAAACGTTCCTTGACGG
	169	TCGTCGAGCAGACGAGATTGCACG
	170	TCTTTGCCGCGTAACTGACTGCTT
	171	TTTATGTGCCAAGGGGTTAACCGA
	172	TGTTACTGTGGTTCACGGCAGTCC
35	173	CGCGCCTCGCTAGACCTTTTATTG
	174	ACAAATGCGTGAGAGCTCCCAACT
	175	CGCGCAGATTATAGACCCGAATGT
	176	CAAATAACGCCGCTGAATCGGCGT
	177	CCTTCGTGCATCGGTGATGATGTT
40	178	TGAACACGAGCAACACTCCAACGC
	179	CAGCAGATCCTTCGTAGCGGTCGT
	180	GGAACCTGGTGAGTTGTGCCTCAT

182 CCCAACGTCACTGAAGCTCACAGT 183 TGTCAGAGCCCGCGACTCAGACGG	
183 TGTCAGAGCCCGCGACTCAGACGG	-
184 TACACGAAGCCTCTCCGTGGTCCA	
5 185 CTCAGAAGTCCTCGGCGAACTGGG	
186 ATCCTTTTATCTACTCCGCGGCGA	
187 AGGCGTGCAGCAACAGGATAAACC	
188 ACTCTCGAGGGAGTCTCTGGCACA	
189 TTGCCAGGTCCATCGAGACCTGTT	
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198 TAACCCGATTTTTGCGACTCTGCC	
199 CGTCGCATTGCAAGCGTAGGCTTG	
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201 GGAGGCTGGGGGTCGCGCTTAAGT	
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30 210 GGGGCGGTTACCAAAAAATCCGAT	
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219 AGTCAGGCGAGATGTTCAGGCAGC	
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	223	CGACGGATGCAGAGTTCAGTGGTC
	224	CCCGCATGCCTGGCGGTATTACAA
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	233	CCAATGCCTTTGAGTAAGCGATGG
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	235	TTGACCATTACGTGTTGCGCCCAT
	236	TCGCGTATTTGCGGAATTCGTCTG
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	259	CCTATCCCGGCGAGAACTTCTGTG
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	263	ATGCGCGCTTATCCTAGCATGGTC
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	268	TAGATCAACTCGCGTACGCATGGA
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	271	GCGCTATGTCAATCGTGGGCGTAG
	272	AGCGAGGTTTCTAGCGTCGACACC
	273	CGATGAAGACAGGTTTGCTGTTGC
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	276	AGGCCGATTTCACCCGCCAATTGC
	277	GAGCCCTCACTCCTTGCCCTTTGA
	278	GGGTGGACATCCGCCTCGCAGTCA
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	282	GTGCACCAGACATTCGAACTCGGA
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	285	AAGGCTCAACACGCCTATGTGCGC
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	287	ATGTCCCATGTAAAGACGCGTGTG
	288	ATGGAGTCTGCTCACGCCCAAAGG
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	290	CAGAGCCGTGGCAACATTGCGAGC
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	292	GACGTACCGGAAGCGCCGTATAAA
	293	ATGCGAGCAATGGGATCCGGATTC
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	295	CGCACCGTAAGTAGATTTGCCCGC
	296	AGGGTATCGGAGCCAGGGCTTACC
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	300	CCGACAGCAGCCAAGACGTCCCAG
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	302	CATAAAAAACCTGGGGCTCTGCG
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	305	GGGATGCGTATTTTAGCGAACACG
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	308	CGAGAAGATGCCTCACGCAACCAA
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	314	TTGATGGGCGGCAATGCTCTTGCT
	315	ATTGTGAGATGCGCCAAATTCCCC
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	322	CGCGTCTCTAACTGAGAGCAGCCA
	323	AGGCGCACATGTACGGACATTCAG
	324	GATGAGTGGCACGTCGGTGTGTAA
	325	TGATCCATATTGTCGGACGTTGCG
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	327	AGCATTGGCGTTTTTCCGCAACGA
	328	GGTAATATTCAGCGCGACCGCTCA
	329	ATAGCGTACGACGAGGTGACGCGC
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25	331	TAGGTCACGATGCGTTTGACGCTA
	332	ACTGCCCGTACCTCTGGTTCTGGC
	333	CAAAAATCGGGTGAACATTGGCTG
	334	CCTTTGGCCTGAAGTTGTCGTAGC
	335	GTGCCCACGAGCGTATCGTTGTA
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	337	GGGTGCTACCATTGCATTAGTCCG
	338	ACCACGCGCGTACGTGTAACCGAG
	339	CCATGATGCATTGGGTGCATTTAG
	340	GGTCCGGCCCTACGAAACGTTCGA
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	342	GTTAGGGCGACGCATATTGGCACA
	343	GGGTCAGTCAGGTGCGTTAGGATC
	344	GCCGTGAAGTCGAATGCAGATCGA
	345	GCCACCACCAGTGCATTCAGGTA
40	346	GAGCTTAGTTTGCGGTCATCGGGC
	347	TGTTTGCCGCCATTAGGGAGTAAC
	348	GCTCCGCTGGATGTGCCGGTTTAG

	349	CGGTAGCATGCGAGATCCCTGTTA
	350	CTACGCTCTACCAGTTGCCTGCGA
	351	GTGCCTCCTGCTGTATTTGCCAAG
	352	TTGCGACTCGACTTGGACGAGTAG
5	353	TCTGGGAGCTGTTTACTCCAGCCA
	354	TGCACGCGGAACTCCCTTTACCAT
	355	TGGCAGCAAATGAATCGAAAGCAC
	356	AACTGGTGACGCGGTACAGCGAAG
	357	AGACGATTACGCTGGACGCCGTCG
10	358	ATGCCCTCCTTCATGGAAAGGGTT
	359 .	ATTCTCGGAGCGTATGCGCCAGAA
	360	ATAGCGGAGTTTGGGTACGCGAAC
	361	ACCTACGCATACCGCTTGGCGAGG
	362	GATTACCTGAATGGCCAAGCGAGC
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,	364	CGGAATGATGCGCTCGACAACGCT
	365	TGAGAGAGGCGTTGGTTAAGGCAA
	366	AAGCAGGCGAAGGGATACTCCTCG
	367	TCACGACAGACGGGCCGAGATTAC
20	368	AAGCAATTTGGCCTCGTTTTGTGA
	369	GCTGGTTGCGGTAGGATCGCATAT
	370	TTGTGAATCCGTTCTGTCCCCGAC
	371	CTCCGATGACAATTGTGGAGAGCA
	372	TGGGCTCCTCTGAGGCGAGATGGC
25	373	GGATAGAGTGAATCGACCGGCAAC
	374	TGCACCGAACGTGCACGAGTAATT
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• 1	376	TCGCTACCTAAGACCGGGCCATAC
	377	TGGCATTGACGAGCAGCAGTCAGT
30	378	CGCGTCCCAGCGCCCTTGGAGTAT
	379	ATGAAGCCTACCGGGCGACTTCGT
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	381	TGGCGTGGGACCATCTCAAAGCTA
	382	CCGCATGGGAACACGTGTCAAGGT
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	384	ATTACGGTCGTGATCCAGAAAGCG
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	386	GGGCCGCATTCTTGATGTCCATTC
	387	CCTCGGATGTGGGCTCTCGCCTAG
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	389	CGATACGAACGAGGATGTCCGCCT
	390	TACGCCGGTTAGCACGGTGCGCTA

	391	CATACGATGTCCGGGCCGTGTCGC
	392	ATCCGCAGTTGTATGGCGCGTTAT
	393	GGGTAAGGGACAAAGATGGGATGG
	394	ATTGGAGTGTTTTGGTGAATCCGC
5	395	GAACCGAGCCAACGTATGGACACG
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	398	AATCGTGGGCGCAGCAAACGTATA
	399	GTCGCCGGATTGCTCAGTATAAGC
10	400	ACCCGTCGATGCTTCCTCCTCAGA
	401	ATCCGGGTGGGCGATACAAGAGAT
	402	TTCCGCATGAGTCAGCTTTGAAAA
	403	GCAAAGTCCCACTGGCAAGCCGAT
	404	CGACCTCGGCTTCATCGTACACAT
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	406	CAGATGAAGGATCCACGGCCGGAG
	407	TCAAAGGCTCTTGGATACAGCCGT
	408	TCCGCTAATTTCCAATCAGGGCTC
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	411	CTTAGTTGGGGCGCGGTATCCAGA
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·	413	CCGATTACAAATTGACTGACCGCA
	414	AGACGTACGTGAGCCTCCCGTGTC
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	416	GGAGGCGCTGTACTGATAGGCGTA
	417	TGTTTTGAATTGACCACACGGGA
	418	CATGTCTGGATGCGCTCAATGAAG
	419	GCCCGCTAATCCGACACCCAGTTT
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	421	GAATCACCGAATCACCGACTCGTT
	422	AACCAGCCGCAGTAGCTTACGTCG
	423	TTTTCTGAGGGACACGCGGGCGTT
	424	GGTGCTCCGTTTGATCGATCCTCC
35	425	CCGCTTAGGCCATACTCTGAGCCA
	426	TAAGACATACCGACGCCCTTGCCT
	427	GTTCCCGACGCCAGTCATTGAGAC
	428	TAAAAGTTTCGCGGAGGTCGGGCT
	429	CGGTCCAGACGAGCTGAGTTCGGC
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	431	GCTTGGATGCCCATGCGGCAAGGT
	432	AGCGGGATCCCAGAGTTTCGAAAA

434 GCATCGGCCGTTTTGACCATATTC 435 CATAGCGCTGCACGTTTCGACCGC 436 ACCCGACAACCACCAATTCAAAAA 5 GCGAACACTCATAAGAGCGCCCTG 438 TTTTGGTGTGGCCGGTTGAAGCTC	
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5 437 GCGAACACTCATAAGAGCGCCCTG	
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15 447 GTCGCCAGGACTGGGCCGATGTGA	
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35 467 ATGGACGGCTTCGCAGTCCTCTT	
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493	AGGAGACATACGCCCAAATGGTGC
494	ATTGAGAACTCGTGCGGGAGTTTG
495	CTCTTTGTAGGCCCAGGAGGAGCA
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513	AAAGGAGCTTTCGCCCAACGTACC
514	AGTGATTGTGCCACTCCACAGCTC
515	GCGATCGTCGAGGGTTGAGCTGAA
516	GGGAGACAGCCATTATGGTCCTCG

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526	AATGCGACCTCGACGAGCCTCATA
527	CCGAAACCGTTAACGTGGCGCACA
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537	GTGTCGGCGCTATTTGGCCTTACC
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543	AAGATCTGCGAGGCATCCCGGCTT
544	GCAAGTGTATCGCACAGTGCGATT
545	CCGACAAGGCCTCAATTCATTCTG
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550	TTCCGTCAGGCGGATCAACGGAAT
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555	GTCTGCGGCCGACTTGCTATGCAT
556	AACTTGCTCATTCTCAAGCCGACG
557	ACGTCAGCGATTGTGGCGAAATAT
558	ACGGCCTGCGTCAGCACATGCATC

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559	ATACCTCCGCAGAACCATICCGTT
560	AGTTCGCGGTCCCACGATTCACTT
561	TGCTCAATTTGTGCAGAAAACGCC
562	TTATCGCGAGAGACGACCGTGTCC
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567	TAGCGTCTTGCGTGAAACCATGGG
568	CCACCCGACAGCGCTGGACTCTT
569	ACGAGCACTGAAGGCTGCTTTACG
570	CATATCAGCGTCGTCTAGCTCGCG
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572	GGCCCGACACTACAGGGTAATCA
573	GGCTCCAGGGCGAGATTATGAATG
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583	CATTCCGCGCGAGTTGAAATCCAG
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598	GCCATGTTCAAGGGCCTTTCGAAG
599	CGCGGTGTTTTGTCTAGGTGCCGG
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	604	GTCTTCATCGGCCCGCGCAAGCTA
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	606	GTAGCAGGGTCCGCAAGACCAAGC
	607	TCGCCAACGCAGGGTAACTGCCAT
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	613	CGGTCTCAGCAACACTGTCGCAAA
	614	CGAACGTTCTCCGATGTAATGGCC
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	618	ACTCGAACGGACGTTCAATTCCCA
	619	CTGCATGGTGTGGGTGAGACTCCC
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	623	GGCGTGGGAGGATAAGACGATGTC
	624	TGCTCCATGTTAGGAACGCACCAC
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	626	CCGCGCGTATCTATCAGATCTGGG
	627	AAAGCATGCTCCACCTGGAGCGAG
·	628	ACTTGCATCGCTGGGTAGATCCGG
	629	TGCTTACGCAGTGGATTGGTCAGA
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	631	GCAATTCTGGGCCATGTATTCGTC
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	637	TCCGCGTGGACTGTTAGACGCTAT
•	638	CATTAGECCGCTGTCGGTAACTGT
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	641	CATGATCCTCTGTTTCACCCGCGG
	642	GGCGTAGCGCTCTAAAAGCTTCGG

644 TATGGAAAGGGCACACC 645 CTGTGTTGATGAGAGATCACACC 646 ACTCGCTGAAGAGATCACACC 647 CAGGCCGAACCACGCGGTTACAC 648 GGCGCAATGGGCGCATAAATACTA 649 GGTCAATTGCGCTACACC 650 TGAGGCCTGTTTGATTGACC 651 GATGGTGACTGAGACCCCTA 652 CGCGCATAGGGCCCTTCCGC 653 TCTTCTGGCTGACATGGGGAGA 654 GCGTCGATTCAGGGAGAC 655 TCGTTCGGCTATAGGGGAGA 655 TCGTTCGGCTGTCCGGCACCCGAA 654 GCGTTCGAATTCAGGGGCCCTTA 655 TCGTTTCGGCTGTCAGGAGCCCTTA 655 TCGTTTCGGCCTTGAGAGAGTATCG 656 AGGTGCAAGTGCAAGAGGCCCTTA 657 CGCCAGTTTCGATGGCTGAAGGCGAAGGC 658 GCTTTACCGCCGATCCCAAGATATC 659 GTGCTTGACGAAGAGGCGAAATGT 659 GTGCTTGACGAAGAGGCGAAATGT 659 GTGCTTGACGAAGAGGCGAAATGT 660 CAGTCCGTGCGCTTCATGTCCTCA 661 TACGGCTAAGAGCATCCCACGTAT 662 GCGAGTCTTGTGGGGAACATGT 663 CCAAAGCGAAGCGACCTTCTAT 664 GCCGATGTTCCCCTCACG 665 AAATCCGCGATGTCCCACGTAT 666 GGCTTCGCCCGTTATCACCCGAC 666 GGCTTCGCCCGTTACCCTCCGG 667 TGTAGAGTCCCACGTACCCACTT 668 CACTAGTCTGGGCAAGGCT 669 GGCTTCGCCACCTTTCACCGAAC 667 TGTAGAGTCCCACGTAGCCGGCT 668 CACTAGTCTGGGCAAGAGT 669 GGCTTCACCACGTAGCCGGCAT 669 GGCTTCACCACGTAGCCGGCAT 669 GGCTTCACCACGTAGACCCCGTAA 671 CGGACTGCCCGTTTGAAGTTGAG 672 ATCGTTCAGCACTGAACCCCGTAA 673 ATCGTTCAGCACTGAACCCCGTAA 674 TTCCAGGCATTAAGAGACCCGTAA 675 GTGCGACTTAAGGAGAGGAGCC 676 CTCATCGTCCTAACAGGAGAGCC 677 AATGGATTCAACAGAAGACC 678 CTCATCGTCTAACAGGAAGACC 679 AAATTCTCGTTGGTGAGCGCCGTAA 679 AAATTCTCGTTGGGAGAGCCC 670 ATTGCTTTATCCTTGCAGAGCCCAAT 671 CTCATCGTCTTAACAGGAGAGCC 672 ATCGTTCAGCAACTAGTCCAACCAA 673 CCGTGGGAGGAATCCAACCAA 674 CCGTGGGAGGAATCCAACCAAC 675 GTGCGACTTAACAGGAGAGCC 676 CTCATCGTCTTACCACGAACCCAA 677 AATGGACTTACTCACCAACGAAGCC 678 CTCATCGTCTTACCACGAACCCAA 679 AAATTCTCGTTGGGCGGCACTTCAA 670 CCGTGGGAGGCAATCACCAACCAACCAA 671 CCGTGGGAGGCAATCAACCAACCAACCAACCAACAAGTCCCAACCAA		643	AGTGATGCCATCAGGCCCGTATAC
646 ACTCGCTGGAATTTGCGCTGACAC 647 CAGGCCCGAACCACGCGGTTACAG 648 GGCGCAATGGCCGATAATACTA 649 GGTCAATTGCGCTAAATACTA 650 TGAGGGCTGTTTGGTATTTGACCC 651 GATGGTGACTGCACTTCCGC 652 CCGCGCATAGCGCAATAGGGGAGA 653 TCTTCTGGCTGTCCGGCACCCGAA 654 GCGTTCGCAATTCACGGGCCCTTA 655 TCGTTTCGGCCTTGACAGGCCACCGAA 654 GCGTTCGCAATTCACGGGCCACCCGAA 655 TCGTTTCGGCCTTGAGGCCACCGTA 656 AGGTGCAAGTGCAAGGCCACGAGGC 657 CGCCAGTTTCGATGGCGCACCGTTT 658 GCTTTACCGCCGATCCCAGATATC 659 GTGCTTGACGACGAGGCCAAATGT 660 CAGTCCGTGACGATCCCAGATGT 661 TACGCGTAAGAGCCTACCCTCGCG 662 GCCGAGTCTTTTGTGGGGACATGTGT 663 CCAAAGCGAAGCGACCGTACCAATTTA 664 GCCTTAGGTTGCTTCTACCAAC 665 AAATCCGCGTACCAGTTACCAATTTAG 666 GCTTCCCACCCGTACCAATTTAG 667 TGTAGAGTCCCACTTACCAAGTAAAGC 668 CACTAGTCTGGAGCGCAATTAAAAGC<		644	TATGGAAAGGCAACAGCGCTATC
5 647 CAGGCCCGAACCACGCGGTTACAG 648 GGCGCAATGGGCCGATAAATACTA 649 GGTCAATTGGCGCTAA 650 TGAGGGCTGTATGTATTTGACCC 651 GATGGTGGACTGGAGGCCCTTCCGC 651 GATGGTGGACTGGAGGCCCTTCCGC 652 CCGCGCATAGCGCAATAGGGGAAA 653 TCTTCTGGCTTGCAGAGTATCG 654 GCGTTCGCAATTCACGGGCCCTTA 655 TCGTTTCGACGAGGCGAAGCC 656 AGGTGCAAGTCCAGGCAGAGCC 657 CGCCAGTTTCGATGGCTGACGTTT 658 GCTTTACCGCCGATCCCAGATATC 659 GTGCTTGACGAGAGGCGAAATGT 660 CAGTCCGTGCGCTTCATGTCCCCA 661 TACGCGTAAGAGCCTACCCTCGCG 662 GCCGAGTTGTGGGGACATGTT 663 CCAAAGCGAAGCGAACCTTCTAT 664 GCCGTAGGTTGCTCTTCACCGAAC 665 AAATCCGCGATCCCGTACCAATTTAG 666 GGCTTCGCACCGTACCAATTTAG 667 TGTAGACTCCACCTACCAGTATAGATT 668 CACTAGTTCGGACGCAATAGATT 669 TGTACTCGGCAGGCCCAATAGATT 670 AACGGTACCCGTTTGCAAGCCCGTAA		645	CTGTGGTTGATGGAGGATCCACAC
648		646	ACTCGCTGGAATTTGCGCTGACAC
649 GGTCAATTCGCGCTACATGCCCTA	5	647	CAGGCCCGAACCACGCGGTTACAG
10		648	GGCGCAATGGGCGCATAAATACTA
10 651 GATGGTGGACCCTTCCGC		649	GGTCAATTCGCGCTACATGCCCTA
10 652 CCGCGCATAGCGCAATAGGGGAGA 653 TCTTCTGGCTGTCCGGCACCCGAA 654 GCGTTCGCAATTCACGGGCCCTTA 655 TCGTTTCGGCCTTGGAGAGTATCG 655 AGGTGCAAGTGCAAGGCGAGAGGC 657 CGCCAGTTTCGATGGCTGACGTTT 658 GCTTTACCGCCGATCCCAGATATC 659 GTGCTTGACGAAGAGGCGAAATGT 660 CAGTCCGTGCGCTTCATGTCCTCA 661 TACGCGTAAGAGGCGAAATGT 662 GGCGAGTCTTGTGGGGACATGTGT 663 CCAAAGCGAAGCGAGCTGTCTAT 664 GCCGTAGGTTGCTCTCACCGAAC 665 AAATCCGCGATGTCCTCACCGAAC 666 GGCTTCGACCCGTACCAATTAG 666 GGCTTCGACCCGTACCAATTAG 667 TGTAGAGTCCCACCGTACCAATTAG 668 CACTAGTCTGGGGCAAGTGCATT 669 TGTACTCGGCAGCGCAATAGATT 669 TGTACTCGGCAGCGCAATAGATT 670 AACGGGTATCGGAAGCGCAATAGATT 670 AACGGGTATCGGAAGCGCAATAGAC 671 CGGACTGCCGTTAACAGCAAGCC 674 TTCCAGGCATTGAGAGCCCGTAA 673 ATGCATCGAACTAGTCGTGACGGC 674 TTCCAGGCATTAAGGAGAGCCC 675 GTGCGACATCTACTCCACCATCCC 676 CTCATCATCACCAAGAGCCC 676 CTCATCATCACCAAGAGCCC 676 CTCATCATCACCAAGAGCCC 676 CTCATCATCACCAAGCGCC 677 AATGGCACTTCGGCGGGTGATCCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTCCAACTCGA 682 CGCGACTAAGGTGCTCCAACTCGA 682 CGCGACTAAGGTGCTCCAACTCGA 683 GCTCGATTTCACCGCCCCTTTTTC		650	TGAGGGCTGTTTGGTATTTGACCC
653 TCTTCTGGCTGTCCGGCACCCGAA 654 GCGTTCGCAATTCACGGGCCCTTA 655 GCGTTCGCAATTCACGGGCCCTTA 655 TCGTTTCGGCCTTGGAGAGTATCG 656 AGGTGCAAGTGCAAGGCGAGAGGC 657 CGCCAGTTTCGATGGCTGACAGTTT 658 GCTTTACCGCCGATCCCAGATATC 659 GTGCTTGACGAAGAGGCGAAATGT 660 CAGTCCGTGCGCTTCATGTCCTCA 661 TACGCGTAAGAGGCGAAATGT 662 GGCGAGTCTTGTGGGGACATGTGT 663 CCAAAGCGAAGCGAGCGTGTCTAT 664 GCCGTAGGTTGCTCTCACCGAC 665 AAATCCGCGATGTCCCGTCAGGCT 666 GGCTTCGCACCCGTACCAATTTAG 667 TGTAGAGTCCCACCTACCCAGAT 668 CACTAGTCTGGGGCAAGGTGCATT 669 TGTACTCGGCAGCGCAATTGATT 669 TGTACTCGGCAGGCGCAATTGAGT 669 TGTACTCGGCAGGCGCAATTGAG 671 CGGACTGCCGTTTTCAAGTTGAG 672 ATCGTTCAGCACTGGAGCCCGTAA 673 ATGCATCGAACTGGAGCCCGTAA 674 TTCCAGGCATTAAGGAGCCC 674 TTCCAGGCATTAAGGAGAGCC 675 GTGCGACATCTACTCCACGATCCC 676 CTCATCATCACACCAGAGCCC 677 AATGGCACTTCGCGGGTGATCCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTCCAACTCGA 683 GCTCGATTTCAACCGCCCGTTTTTC	[651	GATGGTGGACTGGAGCCCTTCCGC
	10	652	CCGCGCATAGCGCAATAGGGGAGA
		653	TCTTCTGGCTGTCCGGCACCCGAA
656 AGGTGCAAGTGCAAGGCGAGAGGC		654	GCGTTCGCAATTCACGGGCCCTTA
15		655	TCGTTTCGGCCTTGGAGAGTATCG
658 GCTTTACCGCCGATCCCAGATATC 659 GTGCTTGACGAAGAGGCGAAATGT 660 CAGTCCGTGCGCTTCATGTCCTCA 661 TACGCGTAAGAGCCTACCCTCGCG 662 GGCGAGTCTTGTGGGGACATGTT 663 CCAAAGCGAAGCGAGCGTGTCTAT 664 GCCGTAGGTTGCTCTTCACCGAAC 665 AAATCCGCGATGTGCCGTGAGGCT 666 GGCTTCGCACCCGTACCAATTTAG 667 TGTAGAGTCCCACGTACCAATTTAG 668 CACTAGTCTGGGGCAAGGTGCATT 669 TGTACTCGGCAGCGCAATGATT 669 TGTACTCGGCAGCGCAATAGATT 670 AACGGGTATCGGAAGCGTAAAAGC 671 CGGACTGCCCGTTTGCAAGTTGAG 672 ATCGTTCAGCACTGGAGCCCGTAA 673 ATGCATCGAACTAGTCGTGACGGC 674 TTCCAGGCATTAAGGAGAGGCC 675 GTGCGACATCACTCCACGATCCC 676 CTCATCGTCTAACACGAGAGCCC 677 AATGGCACTTCGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCG 681 TTAAGGATCAGGCGGAGCTTGCAA 682 CGCGACTAAAGTGCTGCAACTCCA 683 GCTCGATTTCACGCCCTTTTCC	[656	AGGTGCAAGTGCAAGGCGAGAGGC
659 GTGCTTGACGAAGAGGCGAAATGT 660 CAGTCCGTGCGCTTCATGTCCTCA 661 TACGCGTAAGAGCCTACCCTCGCG 662 GGCGAGTCTTGTGGGGACATGTGT 663 CCAAAGCGAAGCGAGCGTGTCTAT 664 GCCGTAGGTTGCTCTTCACCGAAC 665 AAATCCGCGATGTGCCGTGAGGCT 666 GGCTTCGCACCCGTACCAATTTAG 667 TGTAGAGTCCCACGTAGCCGGCAT 668 CACTAGTCTGGGGCAAGGTGCATT 669 TGTACTCGGCAGCGCAATAGATT 670 AACGGGTATCGGAAGCGTAAAAGC 671 CGGACTGCCCGTTTGCAAGTTGAG 672 ATCGTTCAGCACTGGAGCCCGTAA 673 ATGCATCGAACTAGTCGTGACGGC 674 TTCCAGGCATTAAGGAGAGGGAGC 675 GTGCGACATCTACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACCGCCCTTTTC	15	657	CGCCAGTTTCGATGGCTGACGTTT
20	·	658	GCTTTACCGCCGATCCCAGATATC
10 10 10 10 10 10 10 10	Ī	659	GTGCTTGACGAAGAGGCGAAATGT
10 10 10 10 10 10 10 10	[660	CAGTCCGTGCGCTTCATGTCCTCA ·
663 CCAAAGCGAAGCGAGCGTGTCTAT 664 GCCGTAGGTTGCTCTTCACCGAAC 665 AAATCCGCGATGTGCCGTGAGGCT 666 GGCTTCGCACCCGTACCAATTTAG 667 TGTAGAGTCCCACGTAGCCGGCAT 668 CACTAGTCTGGGGCAAGGTGCATT 669 TGTACTCGGCAGGCGCAATAGATT 669 TGTACTCGGCAGGCGCAATAGATT 670 AACGGGTATCGAAGCGTAAAAGC 671 CGGACTGCCCGTTTGCAAGTTGAG 672 ATCGTTCAGCACTGGAGCCCGTAA 673 ATGCATCGAACTAGTCGTGACGGC 674 TTCCAGGCATTAAGGAGAGGGAGC 675 GTGCGACATCACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		661	TACGCGTAAGAGCCTACCCTCGCG
664 GCCGTAGGTTGCTCTTCACCGAAC 665	20	662	GGCGAGTCTTGTGGGGACATGTGT
Section		663	CCAAAGCGAGCGAGCGTGTCTAT
25 667 TGTAGAGTCCCACGTAGCCGGCAT 668 CACTAGTCTGGGGCAAGGTGCATT 669 TGTACTCGGCAGGCGCAATAGATT 670 AACGGGTATCGGAAGCGTAAAAGC 671 CGGACTGCCCGTTTGCAAGTTGAG 672 ATCGTTCAGCACTGGAGCCCGTAA 673 ATGCATCGAACTAGTCGTGACGGC 674 TTCCAGGCATTAAGGAGAGGGAGC 675 GTGCGACATCTACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		664	GCCGTAGGTTGCTCTTCACCGAAC
1		665	AAATCCGCGATGTGCCGTGAGGCT
668 CACTAGTCTGGGGCAAGGTGCATT 669 TGTACTCGGCAGGCGCAATAGATT 670 AACGGGTATCGGAAGCGTAAAAGC 671 CGGACTGCCCGTTTGCAAGTTGAG 672 ATCGTTCAGCACTGGAGCCCGTAA 673 ATGCATCGAACTAGTCGTGACGGC 674 TTCCAGGCATTAAGGAGAGGGAGC 675 GTGCGACATCTACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 35 677 AATGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		666	GGCTTCGCACCCGTACCAATTTAG
669 TGTACTCGGCAGGCGCAATAGATT 670 AACGGGTATCGGAAGCGTAAAAGC 671 CGGACTGCCCGTTTGCAAGTTGAG 672 ATCGTTCAGCACTGGAGCCCGTAA 673 ATGCATCGAACTAGTCGTGACGGC 674 TTCCAGGCATTAAGGAGAGGGAGC 675 GTGCGACATCTACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 35 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC	25	667	TGTAGAGTCCCACGTAGCCGGCAT
670 AACGGGTATCGGAAGCGTAAAAGC 671 CGGACTGCCCGTTTGCAAGTTGAG 672 ATCGTTCAGCACTGGAGCCCGTAA 673 ATGCATCGAACTAGTCGTGACGGC 674 TTCCAGGCATTAAGGAGAGGAGC 675 GTGCGACATCTACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC	1	668	CACTAGTCTGGGGCAAGGTGCATT
671 CGGACTGCCCGTTTGCAAGTTGAG 672 ATCGTTCAGCACTGGAGCCCGTAA 673 ATGCATCGAACTAGTCGTGACGGC 674 TTCCAGGCATTAAGGAGAGGGAGC 675 GTGCGACATCTACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		669	TGTACTCGGCAGGCGCAATAGATT
30 672 ATCGTTCAGCACTGGAGCCCGTAA 673 ATGCATCGAACTAGTCGTGACGC 674 TTCCAGGCATTAAGGAGAGGGAGC 675 GTGCGACATCTACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 35 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		670	AACGGGTATCGGAAGCGTAAAAGC
673 ATGCATCGAACTAGTCGTGACGGC 674 TTCCAGGCATTAAGGAGAGGGAGC 675 GTGCGACATCTACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		671	CGGACTGCCCGTTTGCAAGTTGAG
674 TTCCAGGCATTAAGGAGAGGGAGC 675 GTGCGACATCTACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC	30	672	ATCGTTCAGCACTGGAGCCCGTAA
675 GTGCGACATCTACTCCACGATCCC 676 CTCATCGTCCTAACACGAGAGCCC 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		673	ATGCATCGAACTAGTCGTGACGGC
676 CTCATCGTCCTAACACGAGAGCCC 677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGGCG 681 TTAAGGATCAGGCGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		674	TTCCAGGCATTAAGGAGAGGGAGC
677 AATGGCACTTCGGCGGTGATGCAA 678 CCGTGGGAGGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		675	GTGCGACATCTACTCCACGATCCC
678 CCGTGGGAGGAATCCAACCGAGG 679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGGCG 681 TTAAGGATCAGGCGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		676	CTCATCGTCCTAACACGAGAGCCC
679 AAATTCTCGTTGGTGACGGCTCAT 680 TTGCTCTTATCCTTGTCCTGGCG 681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC	35	677	AATGGCACTTCGGCGGTGATGCAA
680 TTGCTCTTATCCTTGTCCTGGGCG 681 TTAAGGATCAGGCGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		678	CCGTGGGAGGGAATCCAACCGAGG
681 TTAAGGATCAGGCGGAGCTTGCAG 682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		679	AAATTCTCGTTGGTGACGGCTCAT
682 CGCGACTAAGGTGCTGCAACTCGA 683 GCTCGATTTCACGGCCCGTTGTTC		680	
683 GCTCGATTTCACGGCCCGTTGTTC		681	
TO A CONTROL OF THE C	40	682	CGCGACTAAGGTGCTGCAACTCGA
684 AGCAGAGTGCGTTGCAGAGGCTAA		683	GCTCGATTTCACGGCCCGTTGTTC
		684	AGCAGAGTGCGTTGCAGAGGCTAA

685	TGGAGGTGAGGACGACGTGCACTA
686	AACCGTTTAGGGTACATTCGCGGT
687	TATGATCGCTCGGCTCACAGTTTG
688	GACTTTTTGCGGAAACGTCATGGT
689	TGTCGGTTATTCCACCTGCAAGGA
690	CTATGGTTTGCACTGCGCCGTCGA
691	AGCAGGGAAATTCAATCGTTCGCA
692	CCTAACCGAGCGCTTAGCATTTCC
693	CCCGACCCTAACTCGCATTGAATA
694	TTGCTTAATGGTGACGCCACGGAT
695	GATGCTCGCCGTGTTTAGTTCACG
696	TCGGATGACGAGTTTCCATGACGG
697	ATGCGGTCTACTTTCTCGATCGGG
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699	AACTTAATTACCGCCTCTGGCGCC
700	GTGACCGCGAACTTGTTCCGACAG
701	TGCGGATTACCGATTCGCTCTTAA
702	TGATAGGGGGCCACGTTGATCAGA
703	TCGCTCCGTAGCGATTCATCGTAG
704	TGTCAGCTGGTAGCCTCCGTTTGA
705	AGCGTCGCATGACGCTTACGGCAC
706	TCACTCAGCGCTGTGACTGCCTGA
707	GTTTGCGCTATAGTGGGGGACCGT
708	GTCGCATTCTGCACTGGCTTCGCC
709	TGATTAGGTGCGGTCCCGTAGTCC
710	AAGGGACCTTGGGTGACGGCGAGA
711	TCAAATGGCCACCGCGTGTCATTC
712	CTCCGACGACCAATAAATAGCCGC
713	GGCTATTCCCGTAGAGAGCGTCCA
714	TGGATAACCTCTCGGTCCATCCAC
715	GACCGCTGTACGGGAGTGTGCCTT
716	GCCACAGAGTTTTAGCAGGGACCC
717	CCCACGCTTTCCGACCACTGACCT
718	CATTGACACAATGCGGGGACTGAT
719	AGCCACTCGACAGGGTTCCAAAGC
720	CAGGATGAGCAAAGCGACTCTCCA
721	CAAGGTATGGTCTGGGGCCTAAGC
722	GGTGTTCGGCCTAAACTCTTTCGG
723	TTTAGTCGGACCCTGTGGCAATTC
724	CACACGTTTCCGACCAGCCTGAAC
725	CTGGACGAACTGGCTTCCTCGTAC
726	TTCACAATCCGCCGAAAACTGACC

	727	AACAGGATATCCGCGATCACGACA
Ī	728	TACGTCGGATCCATTGCGCCGAGT
	729	CATGGATCTCTCGGTTTGATCGCC
Ī	730	AGCCAGGCGCGTATATACGCTCGG
5	731	ATTTGGCACGTGTCGTGCCATGTT
Ī	732	CCGCGTTGCACCACTTTGAGGTGC
Ţ	733	TTGGACGTGACAAGCATGGCGCTC
	734	CTGAATCGCGCAAGTAAATGGGGG
Γ	735	GATAAGGTCCACCAGATTGCGCGC
10	736	CTAACAATTGCCAACCGGGACGGC
	737	GGTAACCTGGGTGCTTGCAGGTTA
	738	ATCGGAGCCACCATTCGCATTGGG
	739	GTGAACTGGCTTGCCCCAGGATTA
Ī	740	AGGCGATAGCATGGTCCCATATGA
15	741	AACGGTATCGTGGCTAATGCACGA
]	742	AGTAGTGGTCCTCCAGATCGGCAA
	743	CCGTTGAATTGGACGGGAGGTTAG
[744	GCATAAGTGCGGCATCGCGAAGGG
	745	CGACAAGATGCAGCTGCTACATGC
20	746	TCGCAGTGATTCCCGACCGATAAG
	747	CAAGGCGAGTCCACTCGAGGGGAC
	748	GCAACTTGCACGGCATAAGTGGCC
	749	TCCGAGCTTGACGTTCGCGACGTC
	750	AGCGCTGGGCTGTGCCATCTC
25	751	TTCATGTCGCTGAGTAACCCTCGC
	752	CGAACCGCTAATGCCCATTGTCAG
	753	CACGGAAGGTGGGACAAATCGCCG
	754	CACAGATGGAGACAAACGCGCCTT
	755	TTTTCGCAACTCGCTCCATAACCC
30	756	ACGTTACGTTTCCGGCGCCTCTAA
	757	TATCGGATTGCGTGGGTTTCAATC
	758	CTTCCACAATTGTCTGCGACGCAC
	759	TGCACAAAGGTATGGCTGTCCGGC
	760	ACCGTGGCCGGCCATAAGCTACG
35	761	TCCGATGCCAGTCCCATCTTAAGA
	762	CTGAAACCGTGCGAATCGAGGTGA
	763	CGGTGTTCCGCGTGTCGAAAAAAT
	764	TCTAGCAGGCCTTTTGAATCGCCA
	765	GAGTCACCTCTGAGACGGACGCCA
40	766	TCTTCTGTCATCCTGCAGCAGCAT
•	767	GCGGATGAAACCTGAAAGGGGCCT
	768	GGGGCCCCAAACTGGTATCAAGCC

Ţ	769	GCATTGGCTTCGGATTCTCCTACA
Ī	770	AGGCGGCCCAACTGTGAGGTCTTG
	771	ACACCATGTGCTCCGCGCTGCAGT
	772	ACGATGAACATGAATCGGGAGTCG
5	773	CTGCATCCCTGTAGCAGCGCTCCG
	774	GTGCCGTATTTCGACCTGTGCGTT
	775	GCAGTGCGCACTTCAGTTCAAAAG
	776	GCGATTTTAAGCGATGCCTTGACG
	777	TAGGTGACCTAGGCTTGCTTGCGG
10	778	CTGGATACCTTGCCTGTGCGGCGC
	779	CCCCTTACGGCTCGTCGTCTATGC
	780	GCGCTTGCCCGATGCGATGCATTA
	781	TTTCTGTAAGCGGCCTGGGGTTCA
	782	GGCTGAGGTGAGCGGTAAGGATGA
15	783	TCTTGGCCTCCCCGATCTAATTTG
	784	GGAGGTAACGCCGTGTACGTAGGA
	785	GTAATCCATTTGTGGCTGCGTCAA
·	786	CAAACCCATTCCAGCAGACGCCTG
	787	TAGGAGGAATTTGGCATGCGGGCG
20	788	ATAGGTAGGATGTGCCCGGCGTTG
	789	GCAAGTGCTTAGCTCGTCAGCCTC
	790	CTGGCTGTGTCGCATCTCGTTAAC
	791	CTAACGTCGTCTCGCGCAATCACT
	792	TTTTCATAAACGTTGTCCCCGAGC
25	793	AGCAGGAGGACGAACCTCCGCTCC
	794	TTCAAGCACCATCGTGCAATCCAA
	795	AGCGTCGCCAGTGATCGCTAGTGG
	796	TACATTCCCTGCCTCCGTGGGCTT
	797	CGCTTCGCGTATTCAGTAGCGGTT
30	798	TCGGACGCGTCGACACTCATTATA
	799	TCTGAGCAGCCCAGCT
	800	TTGAATTGCCAAGCCCTGAAAGCC
	801	AGTTTTCGCCTTGATGCGTCGGTG
	802	GTTTCATAGGCCACGCGTGCTAAA
35	803	GGAGCGAAGACTTCGTCTGCCCAA
	804	ATTGGCCGAGGGTGAATGCAGCCT
	805	TGATCCATCCGAATGCTTTTCCAT
•	806	GCACACAGTTGTCTTGGCCCATGA
	807	CTGGCGGCAGTGGAAAAAACAAC
40	808	ATCTCCATGCGTAAGACTGCTCCG
	809	TCTCCTCGTCGCAGTTCGTGGA
	810	TAGCGTATTCACTCTTGCCGAGCA

	811	CAATCAAAAGCCACGGCGCGATGG
	812	AGCGTCACGGAATTCAGCAGATCT
	813	GACTCCCTGTTAATGCGCCCAAGG
	814	TAGGCACTGCCGGTTCAGATTCAA
5	815	AACAGGTGATAACGGTGGCCAAT
	816	CGTGCGTACCATGTGTAAGTGCGT
	817	GACCAATTCTACTTCGGCAGCCCA
	818	ATCGGACCGATTTGCTTTTGGCTG
	819	TCCGCCGAAGCACACGCTTATTCG
0 .	820	AACGGTACGCATTGTGAGCAGTGT
-	821	TGGCGACTACTGTTCCCCTGAATC
	822	CAGAGGGACAGCCGTATGCCTTA
	823	CGGTGGTTTTATCGGAATCTGCGA
	824	TTGGCCTCCGACCTCACGACATAT
15	825	CGTTTCGCTAGCATCTGGCGCCGA
.0	826	ACTAAGCGGTGGAGCCGGTGGATG
	827	ATATTGGCTGCGTTTACGGGCCGC
	828	CCGCTATGGTGGCAATCCCGATAC
	829	GTTGCATGTGGCTCAGGCGGCATA
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20	831	CTCTCCAAGGAGACGAGCCAATGT
•	832	GAAAGGACGGGATTTGGGGGCTAA
	833	TATGTAGTACCTTGGCTCGCGCCA
	834	TCCCTTTCGATGAGCGGCTGTACT
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	837	ATGGTAGCAACATTCAACGCCAGG
	838	CTATGAAACGTGTGGCCCAGCAAC
	839	ATGTTGCTAGTGCCTTTCGGGCCT
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30	841	GATAGTGCTCGCAAACGGGCCTTC
	842	GCACCCTGTTGCCTCATTGAGCGT
	843	GGCGTGAATAGAGTGACCAGGCGG
	844	ACGTGCCAGCTGCGGCACTTTAT
35	845	AGTGGAATAGTCGCGTCGTGCCGC
	846	ACTCGCCTATTACCGCTGGATTGG
t	847	GAGACCGGATTGAGATGATCCCGT
• •	848	AAAATGGCAGGCGGCAAGCAATTG
	849	CTGGCAGTTTACCACCGAACCAGT
40	850	TTACATTGCCGATTTCGCATGTGA
-	851	TAAAACTGAAGGGTCGCCTCAGCA
	852	GGCTTCGCATGCCTTTGCAACATT

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853	AAGACCGAAGGTCTCTCTGAGGGC
854	GCCTATGGCTCCAGCTCAGCAGTA
855	CGTATCATAGCGTTCGGTGGACAA
856	CATGCGCTCGCACTCTGCCTGTCT
857	TGGGCAATTCGGAAACGTCGGTCT
858	TTGCGGAGATGCGACGGTACATTG
859	ACTTTCGCACGTCGATCTGGACTG
860	CTAACTGCCGCGGCAAACTGATTA
861	GGCCGCGATTTTATTCCTTGGAT
862	GAATTTGGAACGGTGTTCCGATGA
863	GTCCATCCATCTACGGCATCAGGA
864	TAAACGACCTGGCACATGTGCGTA
865	CACCATCCAAGAGCCAATCCTAGG
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867	GTGCCAACCGACGATCAACCGAAC
868	TGGGGTTCGTACAGGTCGGTTCAT
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893	GAGGGTCCCTGCTCAGAGTTGGTT
894	AAATGCGATCGCCCCTTATGGAAT

ſ	895	CTACCGAATGGATTGCGGATGGC
Ì	896	AGGGACTGGCAGGTCTCTGCGCGT
Ī	897	TAACGATCCATTCCACGAATGCAG
	898	GGCCGCACGTACGATTACGCCTTG
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	905	GTCGGCTTCGAGCGATCGAGTGTG
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Ţ	907	GGCTTCCGCGATAACGTAATTCGC
	908	TGTAGCCGACTAGGGCCGAAGCCC
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	910	TGTCACGCGACGTGCTGCAGATTT
	911	CCGTGTCCGTGTTGTCGACAGGCG
	912	CCCCACACGTTGCGCCTATATGTG
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	915	TCGGGACATGACCGGTACGGAGTC
i	916	TACCTCGAGTGGCCGTTGATCGGG
,	917	TAATTCATGGGGCTAGCCGAACCA
	918	ACACTCTAAGCCGATTCCGTTCGA
25	919	GTGGGCGTGAGTGACACGCACAAA
	920	ACGACTCCTCGGGCAAAGTACGTA
	921	TGTGGTCATGGCGCTACTGTTTTC
	922	CTTTCGCTAGCCAGAGCGGGTTCC
	923	ACAGGGCGTGTTAGCGTGTGACAA
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	925	GTGGGTTTTGTTCACCCTTCTGGG
	926	ACGCAATTCCGCATTACTTACCCG
	927	CGCCTCGACTGCGGTCAAGCACAA
•	928	GTGAAATGGATCCAGAGAGGGCCA
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	930	GTTATTCAGGCGGCTTGTAACGGG
	931	GGGTTCTAGCGTGCGCGTTCAGTT
	932	TTGGGCTCGAGCGGTACACCACTA
	933	CCGTCTTCAGGACAACGGTATGCG
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	935	TAAATTTTATCGCCAGGCGCGCCT
	936	GCCGAACGCAAGATCGCTTGAACT

Γ	937	TAGGCCATTGGTGCCCTAAGACGG
	938	CAAACCACAGCTTACAGGCTGCGT
Ţ	939	TAAACGGAGACTGGCACGGTAGCA
Γ	940	TAGCGCGCATCACACTTGGAATCG
5	941	TGCTGACACAACGAGCCGTTTCG
	942	CGCTTAACGGCATTGACTGTCCAC
Ī	943	TTCCACGGCCGTGTATTACGGATA
Ţ.	944	TTTATGCCGTTGCCGAGGAAGACT
	945	AGTGCCGAGATAGGGGACTGGGCG
10	946	CTAGTCTCCACGCCCTCGGGACGA
Γ	947	CCGCCATTCGGAAGATGGATGATG
Γ	948	TGACGGTGAAAGTCGATTGCGAAG
Γ	949	ATATGCGTCACCACCGGTTCCGA
	950	CCATCAGTGAAGGGGTTGCTGCCA
15	951	CATATGTGCTTGGCTTGCGATGAC
	952	TCTGCTTTGGAAGCCTGAACTGCT
	953	CGATTTGGTCAAGAAGGCGGAAAT
. [954	ATCAGAGGCCTTCCCGCCTCGTTA
Ī	955	ATTGTTGTCGTTGCCACATCGCAG
20	956	TGAAATGTGTCTGGACGCGAGTCT
Ī	957	GCGGGCGATGCTCCTTAAAGGGTA
	958	CCGCAATCTCCATGCGTCGACCGT
Ī	959	TGCCGCGTAATCACCTGGAACTTG
1	960	TTCCAGTAGCCAGCGGTAGTGTGA
25	961	CTGAATTCCGCCTATTGTTCGGCA
	962	GCTTGAACCTCGAGGCGATGTTCT
Ţ	963	CAAGCGTGGAAGTACGACCCGCCA
Ī	964	GTGTGCACTGGATCCGAGCCCTAG
	965	TCCCTGGGCTAGCATTGCGAGGTT
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	967	CGTCACATGCAAACGTTCCCTCCC
	968	TGACCGCATGTGTATTGAGTCGCT
	969	GCGGGCCCAATGAGTATCCGTCAT
	970	TAGTGACTGTGAACGCCCCTGGTT
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	972	TCGATGCAGTCTTTTTCCCGTCAA
	973	ACCCGTGGGGTTTCGCCATTTTT
	974	CTACACGCGCAGTTGTGACTTGTG
	975	CGCAGCGACCTCATCTCTGGAGCC
40	976	CGACCCAGCACTCCTAAAATCGGT
	977	ACGCGCCGCTCATCACTACAATCT
	978	CGCAACTTCCTGTGGCAAAGCCAG

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г		TCGTTGGGCACATAAGGCAACTGA
		CCGCTTGTAATTGCCATTCTCCGT
ļ.		GTAACCAGGGAGTCCTGGGCTGTG
, }	981	AGCGCAAGATCTGGGGGCAGTCAC
		GCGTACATCTGCGGGGCAGTCAC
5	983	CCTCTGTGGCAGGAAAGAAACCGT
1	984	
	985	CCTATGCAATGACCATA
	986	CTCGGTGGATGGCGAATAAGGATA
	987	CCTCACTCGTGATGCCGTGACGCA
10	988	TACGCTCACAGAACGCCATACGCC
ļ	989	CCGGAGAAGTTACGCGGATCGGAC
	990	GCGCCCTCACTGCATTTTTGGTAT
	991	ACTITCAGCACGCGAACAGCGCAA
	992	CTAAACGCCCTTGATGCATGAGCA
15	993	GCTTGCCTTTTACGATCGTCGCTA
	994	CAGACATCGTACGCACTCGGCATC
•	995	TAGCCGCGCGCTCCTATGCTCTT
	996	GATGCCCTTTTGGTCCCCATGCCA
	997	TGAGCTGCCTTGCCACGATGCCTC
20	998	CCGCCGTATACGTGCCATAGTTTG
	999	TAGTGCTCTCCGCGCTCATCCAAC
	1000	CCCTAGATAAGTTGGGGTGĢGACG
	1001	TGAAGGCCACCTGATATGGTTTC
	1002	GCCGCCTCCGACTGGTTAACCCGA
25	1003	CGCACGCTACTAACAGCGGATCA
,	1004	CCGGACCAATTCCAACGAGCATCG
	1005	CATTGAGGTCCACCGTTCACATCC
	1006	AGGACGCAGCATGTCCCAGCCGAG
	1007	TAATCGCGGGCCATACTACCAACG
30	1008	CGCAAATTTCTCCGGTCGGCAAGC
. • • • • • • • • • • • • • • • • • • •	1009	GTGGCTCGACTAATGCCTTGCGTG
	1010	TGTGGGCGTGTTCCGGCTCACTGT
	1011	GTTCTTCCTTTTCTGCGGTGGGAA
	1012	ACCTCGAGTCAGATTGTGCGCCTT
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35	1014	TCCAGTTGAGTCGCGCCGACGAGG
	1015	CGCAACAGGTCAGCCCTTATTTGC
	1016	GCCGTGACTCCTGCAATGTCGGTA
	1017	ATCAGCGCAAGCTGGTCTGAAACA
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40	1019	ACGATCAAGGACTCGTCAGGGTTG
	1020	TTCATGGCACCAAGACCACCGTTA
	1020	11, 10, 11, 11, 11, 11, 11, 11, 11, 11,

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ACAGCAAGGAGATGGATTGCGACG
CGTAAATATCTGCGGCGGTGTGAA
GGAAACACGTGTTCGTCTGTTGGC
CGATGTTAGGATTCGGATAGGCCA
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CGGGAAATGTCTTTAGCCGTCGAA
ATCAGAGCAAATCTGCAGCGGGGA
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Ī	1063	ATTTCACCTCGCTGATCGCTTCCG
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	1066	CTTCTTTGTGCACACTTGCCAGGG
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	1069	CCCGTGGAGATGATGTGCGGCTTA
	1070	CCCAATAGACGCCACAGCCAGTGA
	1071	AACGACCACGACCCTCGCCGAGTA
ıò	1072	GGTGCTTTGTCTGAGGCGAGTGAA
ĵ	1073	CTGTCGGCGCTGCTCTCCGAATTT
	1074	CTCGCCGGAGTGTTGTAAGCATTG
ļ	1075	AGCAATCATGAGAGGTGGCCGGTG
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	1104	GAGGAGGCCAATAGAGCAGCGCGC

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1105 AGTAATCTTGCGGCACACAAGCGG			
1107 TCGTAGAGACGCAGTGCCATCTC 1108 CGAAGCTACACCCCGAGTGCGGTG 1109 ATGATGTGATCTTCCCATGGCTGG 1110 TGTACACGTATCGCCTAG 1111 GGTGTGCTTTTACGCATGTACGCA 1112 AGGCGGGATACGTGGATGCCC 1113 AAATTAGGCACGTCCCACAG 1114 ATAAGTTTTGGCAGCACTTCGCCA 1115 CCTATTTCGGCGGACCTTCGCCA 1116 CTATTTCGGCGGACCTTCGCCA 1117 CCTCTCGGACGGTCCTTTGATCG 1118 CAAGCGAATATGCACTTGGCCG 1117 CCTCTCGGACGGTCCTTTGATCG 1118 CAAGCGAATGCTGTATTACGGCCT 1119 GCATTTCCCATGCCAGAACGTTGA 1120 GTTTTGGCTAACCGTCCTGCTTGA 1121 AGGTTTTGCCAGGGGAATGATGT 1122 ATGTCCACGAGTGCGTCCGATATC 1123 AGACGGTACGAGGGTTCTGCCCC 1124 AATACCGTTCCCATCTGTGCGAGG 1125 ACACAAGGTGCTCAATATCCA 1126 GCCGGCAAAATCCTACAAATCCA 1127 CTTATCCCATGTGCCGGAACCT 1128 GCCGCAAAATCCTACAAAATCCA 1127 CTTATCCCATGTGCCGGATATG 1128 GCGGCAATATGCAGAATACCA 1129 TACGGTGCACGAGAATACGCC 1130 CACCAAGTGTCGAGGATATGGAAATCCA 1130 CACCAGATGTCGAGGATATGGCACCC 1131 GTTCCTACGCCCAAAGAGGTATGG 1132 AGAATATGGGCAACACACCCG 1133 CTCCATCGCACGAGAATACCCA 1135 TTCGCCACGAGAGAATACCCA 1136 ACGTCGTACCCCAAGAAATCCCACCACGAAAAATCCTACAAATTCCA 1136 ATGTCCCTGACGAGAATACCGCC 1131 ATCCCCTGACCGAAATACCACCACCGAACAAATTCCTACCAAATTCCCACCCCAAAAATACCAAATTCCAAAAATTCTTACAAAATTCCAAAATTCTTACAAAATTCCAAAATTCTTACAAAATTCTTACAAAATTCCAAAATTCTTACAAAATTCTTACAAAATTCTTACAAAATTCTTACAAAATTCTTACAAAATTCTTACAAAATTCTTACAAAATTCTTACAAAATTCTTACAAAATTCTTACAAAATTCTTACAAAAAA	ſ	1105	AGTAATCTTGCGGCACACAAGCGG
1108		1106	TGAGGACAAACCGCGCGTAGGATA
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1112 AGGCGGATACGTGGATGCTAGCC 1113 AAATTAGGCACAGCCCTCCCACAG 1114 ATAAGTTTGGTGAGCCATTCGCGA 1115 CCTATTTCGGCGGACCTCCACAG 1116 TTACCGGAATATGCACTTGGCCGC 1117 CCTCTCGGACGTCCCTTTGATCG 1118 CAAGCGAATGCTGTATTACGGCCT 1119 GCATTTCCCATGCCAGAACGTTGA 1120 GTTTTGGCTAACCGTCCTTG 1121 AGGTTTTGCCGGCGAATGATGT 1122 ATGTCCACGAGAGGGTCCTCTGCATATC 1123 AGACGCAATGCTCTCGCCCATATC 1124 AATACCGTTCCCATCTGCGACG 1125 ACACAAGGTGCCTCATCGAATGGT 1126 GCCGGCAAAATCCTACGAATGGT 1127 CTTATCCCATGTGCCGGAA 1127 CTTATCCCATGTGCCGGAA 1128 GCGGCCATAATGCATAGGAACGT 1128 GCGGCCATAATGCATAGGAACATCCA 1129 TACGGTGCATGAGAGGAACTC 1129 TACGGTGCAACAGGGAACTCCCGC 1131 GCTCCTACGCCCAAAGAGGTATGG 1132 AGAATATGGGCAACAGAGATTAGGCCG 1134 ATGTCCCTGACCGAAAATCCTACAAAATCCA 1135 TTCGCCACGAGAGAGAATTCTTCCA 1136 ACGTCGTTCCCGAGAATACGGTCT 1137 ATCCGCTGGCGCTTTGACGAACAAATCTTACACAAAATCTACAAAATCTACAAAATCTACAAAATCTACAAAATCTACACACCAC	·	1110	TGTACACGTATCGCGTTCGCCTAG
1113		1111	GGTGTGCTTTTACGCATGTACGCA
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1120 GTTTTGGCTAACCGTCCTGCTTG 1121 AGGTTTTGTCCGGGCGAATGATGT 1122 ATGTCCACGAGTGCGTCCGATATC 1123 AGACGCGTACGAGGGTTCTGCGCC 1124 AATACCGTTCCCATCTGTGCGAGG 1125 ACACAAGGTGCCTCATCGAATGGT 1126 GCCGGCAAAATCCTACAAAATCCA 1127 CTTATCCCATGTGCCGGTCTGACT 1128 GCGGCCATAATGCATAGCACGGAA 1129 TACGGTGCATCGCAGTATGGGTAA 1130 CACCAGATGTCGAGGATCATCGCC 1131 GCTCCTACGCCCAAAGAGGTATGG 1132 AGAATATGGGCAGCAGCAGCACTC 1133 CTGCAGTCGCACGCAGTAGACCCG 1134 ATGTCCCTGACCGGAATCTTTCCA 1135 TTCGCCACGAGAATACCGGTCT 1136 ACGTCGTTCCCGAGAATACCGTCT 1137 ATCCGCTGGCGCTTTGACGAAGAA 1138 TGAACCAAATTCTTACCGCGTGGA 1139 CACGCGTAGGCTGTGTCATTC 1140 TCGATCCCGCGATCTGCCTATTG 1141 GGAACACTCAACCACCGTGGATCT 1142 TCACACACCACCGTGGATCT 1143 TGTGCTTAGGCACACGCACCCC 1144 GACATTTAACCCGACCGATTGTGC 1145 GGCACCGAGCCAGTAGGCCTCTAA	15	1119	GCATTTCCCATGCCAGAACGTTGA
1122 ATGTCCACGAGTGCGTCCGATATC 1123 AGACGCGTACGAGGGTTCTGCGCC 1124 AATACCGTTCCCATCTGTGCGAGG 1125 ACACAAGGTGCCTCATCGAATGGT 1126 GCCGGCAAAATCCTACAAAATCCA 1127 CTTATCCCATGTGCCGGTCTGACT 1128 GCGGCCATAATGCATAGCACGGAA 1129 TACGGTGCATCGCAGTATGGGTAA 1130 CACCAGATGTCGAGGATCATCGCC 1131 GCTCCTACGCCCAAAGAGGTATGG 1132 AGAATATGGGCAGCAGCAGCACTC 1133 CTGCAGTCGCACGCAGTAGACCCG 1134 ATGTCCCTGACCGGAATCTTTCCA 1135 TTCGCCACGAGAATACGGTCT 1136 ACGTCGTTCCCGAGAATACGGTCT 1137 ATCCGCTGCGCGTTTGACGAAGAA 1138 TGAACCAAATTCTTACCGCGTGGA 1139 CACGCGTAGGCTGTGTCATTC 1140 TCGATCCCGCGATCTGGCCTATTG 1141 GGAACACTCAACCACCGTGGATCT 1142 TCACACACCACCTGGCCACCAGTG 1143 TGTGCTTAGGACACCACGGCAACCC 1144 GACATTTAACCCGACCGATTGTCC 1145 GGCACCGAGCCAGTAGGCCTCTCGA		1120	GTTTTGGCTAACCGTCCTGCCTTG
1123 AGACGCGTACGAGGGTTCTGCGCC 1124 AATACCGTTCCCATCTGTGCGAGG 1125 ACACAAGGTGCCTCATCGAATGGT 1126 GCCGGCAAAATCCTACAAAATCCA 1127 CTTATCCCATGTGCCGGTCTGACT 1128 GCGGCCATAATGCATAGCACGGAA 1129 TACGGTGCATCGAGTATGGGTAA 1130 CACCAGATGTCGAGGATCATCGCC 1131 GCTCCTACGCCCAAAGAGGTATGG 1132 AGAATATGGGCAGCAGCAGCACTC 1133 CTGCAGTCGCACGAGTAGACCCG 1134 ATGTCCCTGACCGGAATCTTTCCA 1135 TTCGCCACGAGAATCTTTCCA 1136 ACGTCGTTCCCGAGAATACGGTCT 1137 ATCCGCTGGCGCTTTGACGAAGAA 1138 TGAACCAAATTCTTACCGCGTGGA 1139 CACGCGTAGGCTGGTGTCATTC 1140 TCGATCCCGCGATCTGGCCTATTG 1141 GGAACACTCAACCACCGTGGATCT 1142 TCACACACCAACTGGCCACAGATG 1143 TGTGCTTAGGACACCACGGTACCC 1144 GACATTTAACCCGACCGATTGTGC 1145 GGCACCGAGCCAGTAGGCCTCTGA		1121	AGGTTTTGTCCGGGCGAATGATGT
1124 AATACCGTTCCCATCTGTGCGAGG 1125 ACACAAGGTGCCTCATCGAATGGT 1126 GCCGGCAAAATCCTACAAAATCCA 1127 CTTATCCCATGTGCCGGTCTGACT 1128 GCGGCCATAATGCATAGCACGGAA 1129 TACGGTGCATCGCAGTATGGGTAA 1130 CACCAGATGTCGAGGATCATCGCC 1131 GCTCCTACGCCCAAAGAGGTATGG 1132 AGAATATGGGCAGCAGCAGCACTC 1133 CTGCAGTCGCACGAGTAGACCCG 1134 ATGTCCCTGACCGGAATCTTTCCA 1135 TTCGCCACGAGGCATTAGTCCGAC 1136 ACGTCGTTCCCGAGAATACCGGTCT 1137 ATCCGCTGGCGCTTTGACGAAGAA 1138 TGAACCAAATTCTTACCGCGTGGA 1139 CACGCGTAGGCTGGTGTCATTC 1140 TCGATCCCGCGATCTGGCCTATTG 1141 GGAACACTCAACCACCGTGGATCT 1142 TCACACACCAACTGGCCACAGATG 1143 TGTGCTTAGGACACCACGGCAACCC 1144 GACATTTAACCCGACCGATTGTGC 1145 GGCACCGAGCCAGTAGGCCTCTGA		1122	ATGTCCACGAGTGCGTCCGATATC
1125 ACACAAGGTGCCTCATCGAATGGT 1126 GCCGGCAAAATCCTACAAAATCCA 1127 CTTATCCCATGTGCCGGTCTGACT 1128 GCGGCCATAATGCATAGCACGGAA 1129 TACGGTGCATCGCAGTATGGGTAA 1130 CACCAGATGTCGAGGATCATCGCC 1131 GCTCCTACGCCCAAAGAGGTATGG 1132 AGAATATGGGCAGCAGCAGCACTC 1133 CTGCAGTCGCACGCAGTAGACCCG 1134 ATGTCCCTGACCGGAATCTTTCCA 1135 TTCGCCACGAGGAATCTTTCCA 1136 ACGTCGTTCCCGAGAATACGGTCT 1137 ATCCGCTGGCGCTTTGACGAAGAA 1138 TGAACCAAATTCTTACCGCGTGGA 1139 CACGCGTAGGCTGGTGTCATTC 1140 TCGATCCCGCGATCTGGCCTATTG 1141 GGAACACTCAACCACCGTGGATCT 1142 TCACACACCAACTGGCCACAGATG 1143 TGTGCTTAGGACACCACGGTAGCCC 1144 GACATTTAACCCGACCGATTGTGC 1145 GGCACCGAGCCAGTAGGCCTCTGA		1123	AGACGCGTACGAGGGTTCTGCGCC
1125	20	1124	AATACCGTTCCCATCTGTGCGAGG
1127 CTTATCCCATGTGCCGGTCTGACT 1128 GCGGCCATAATGCATAGCACGGAA 1129 TACGGTGCATCGCAGTATGGGTAA 1130 CACCAGATGTCGAGGATCATCGCC 1131 GCTCCTACGCCCAAAGAGGTATGG 1132 AGAATATGGGCAGCAGCACCCC 1133 CTGCAGTCGCACGCAGCAGCACCC 1134 ATGTCCCTGACCGGAATCTTTCCA 1135 TTCGCCACGAGGCATTAGTCCGAC 1136 ACGTCGTTCCCGAGAATACGGTCT 1137 ATCCGCTGGCGCTTTGACGAAGAA 1138 TGAACCAAATTCTTACCGCGTGGA 1139 CACGCGTAGGCTGGTGTCATTC 1140 TCGATCCCGCGATCTGGCCTATTG 1141 GGAACACTCAACCACCGTGGATCT 1142 TCACACACCAACTGGCCACAGATG 1143 TGTGCTTAGGACACCAGGCAACCC 1144 GACATTTAACCCGACCGATTGTGC 1145 GGCACCGAGCCAGTAGGCCTCTGA		1125	
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1129 TACGGTGCATCGCAGTATGGGTAA	•	1127	
1130		1128	
1131 GCTCCTACGCCCAAAGAGGTATGG 1132 AGAATATGGGCAGCAGCAGCACTC 1133 CTGCAGTCGCACGCAGTAGACCCG 1134 ATGTCCCTGACCGGAATCTTTCCA 1135 TTCGCCACGAGGCATTAGTCCGAC 1136 ACGTCGTTCCCGAGAATACGGTCT 1137 ATCCGCTGGCGCTTTGACGAAGAA 1138 TGAACCAAATTCTTACCGCGTGGA 1139 CACGCGTAGGCTGGTGTCATTC 1140 TCGATCCCGCGATCTGCCTATTG 1141 GGAACACTCAACCACCGTGGATCT 1142 TCACACACCAACTGGCCACAGATG 1143 TGTGCTTAGGACACCACGGCAACCC 1144 GACATTTAACCCGACCGATTGTGC 1145 GGCACCGAGCCAGTAGGCCTCTGA	25	1129	
1132 AGAATATGGGCAGCAGCACTC 1133 CTGCAGTCGCACGCAGTAGACCCG 1134 ATGTCCCTGACCGGAATCTTTCCA 1135 TTCGCCACGAGGCATTAGTCCGAC 1136 ACGTCGTTCCCGAGAATACGGTCT 1137 ATCCGCTGGCGCTTTGACGAAGAA 1138 TGAACCAAATTCTTACCGCGTGGA 1139 CACGCGTAGGCTGGTGTCATTC 1140 TCGATCCCGCGATCTGGCCTATTG 1141 GGAACACTCAACCACCGTGGATCT 1142 TCACACACCAACTGGCCACAGATG 1143 TGTGCTTAGGACACCCC 1144 GACATTTAACCCGACCGATTGTCC 1145 GGCACCGAGCCAGTAGGCCTCTGA		1130	
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40 1144 GACATTTAACCCGACCGATTGTGC 1145 GGCACCGAGCCAGTAGGCCTCTGA		1142	
1145 GGCACCGAGCCAGTAGGCCTCTGA		1143	
	40	1144	
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		1146	CTCAAGCGTGCATGTTGGTAACCA

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1185	GGATCTTTACTCAGGGGCAGAGCC
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1187	GTCGTCGCGATGGCGTACATCCTT
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Ţ	1192	AGGGTGACTTCGAAGGTCCGAACT
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1	1194	TGTGCAAATTATGCTGGGCGTGAG
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	1197	CTTCATCACGTGACCTTTGTTGCC
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	1202	CTCCTTACACCGTGTGAGGGAACC
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	1221	GCTGTCGCCAGGATCATGTATCGT
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	1224	ACGACGAGGTGAACTTCGTGGGAA
	1225	AGCATTGCCGCGGGCCTTGGTTTA
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	1229	TAGGCCACCCGGTGTTCACAATTC
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1236 ACTCGTCGGAAGCGCCCAGGT 1237 ATGCGAGAGCAGAATTGAGCCGGT 1238 AAGTTGGTTCGTATTCACGCGTGC 1239 TGGGCTTATCGCCGAAGATTGCTA 1240 CAACGGCGAAGACCCAGAATTTTA 1241 AGCGTACGGCGAAAGTCTAGGGAC 1242 ATGCATCCAGCGTCCCCTTGATTA 1243 ACCGTCATCAGTCGCAGGCTTCTG	Γ	1234	TTACGTTGCGGAAGCGTGCCTCTA
1237 ATGCGAGAGCAGAATTGAGCCGGT 1238 AAGTTGGTTCGTATTCACGCGTGC 1239 TGGGCTTATCGCCGAAGATTGCTA 1240 CAACGGCGAAGACCCAGAATTTTA 1241 AGCGTACGGCGAAAGTCTAGGGAC 1242 ATGCATCCAGCGTCCCCTTGATTA 1243 ACCGTCATCAGTCGCAGGCTTCTG	5	1235	ATGTACACGCTGCAATCGTGTCCC
1238 AAGTTGGTTCGTATTCACGCGTGC 1239 TGGGCTTATCGCCGAAGATTGCTA 1240 CAACGGCGAAGACCCAGAATTTTA 1241 AGCGTACGGCGAAAGTCTAGGGAC 1242 ATGCATCCAGCGTCCCCTTGATTA 1243 ACCGTCATCAGTCGCAGGCTTCTG	Γ	1236	ACTCGTCGCGAAGCGCCCAGGT
1239 TGGGCTTATCGCCGAAGATTGCTA 1240 CAACGGCGAAGACCCAGAATTTTA 1241 AGCGTACGGCGAAAGTCTAGGGAC 1242 ATGCATCCAGCGTCCCCTTGATTA 1243 ACCGTCATCAGTCGCAGGCTTCTG		1237	ATGCGAGAGCAGAATTGAGCCGGT
1240 CAACGGCGAAGACCCAGAATTTTA 1241 AGCGTACGGCGAAAGTCTAGGGAC 1242 ATGCATCCAGCGTCCCCTTGATTA 1243 ACCGTCATCAGTCGCAGGCTTCTG		1238	AAGTTGGTTCGTATTCACGCGTGC
1241 AGCGTACGGCGAAAGTCTAGGGAC 1242 ATGCATCCAGCGTCCCCTTGATTA 1243 ACCGTCATCAGTCGCAGGCTTCTG		1239	TGGGCTTATCGCCGAAGATTGCTA
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		1242	ATGCATCCAGCGTCCCCTTGATTA
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		1244	TCTTGACGGCTGGGCATGATTGGA
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1246 TGGTGTCGAACTCCCTTGCGTGTT	ſ	1246	TGGTGTCGAACTCCCTTGCGTGTT
1247 TACTCCAGTCGCCTGCGCGCAAAC		1247	TACTCCAGTCGCCTGCGCGCAAAC
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1271 AGACTGGCAATTTTTCGAGGCCAA		1271	
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1290	CACTCGAGATTCAATGGGCATGGT .
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1312	GATATTGGGTCCGGCGCGCATTAC
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1316 GGTTCCCTTGACCCACCGAATTGA 1317 TTCTGACAACATCGACCCTGGCTC	
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·	1367	ACGTGACGGGAAGGTGGTTGAATC
	1368	AGTTCTTGCGTTGCACGAAACAGA
	1369	GCTCGCCGCGTCTTTATGTCTG
	1370	ATGAACATCGCGAGGCAAGCCTTT
15	1371	CAACCGCGCCCACCAACATTAAGG
	1372	TGATCGAGGACGGCTTGGTAGCCT
	1373	GGAGGCATGCCTTCCGAGAGCAAC
Ì	1374	CACCGATCCTCAACGCAATTGCTA
	1375	GGCCATGAATTGGGAAATCCATGT
20	1376	CTGTTCCAGGCGTAACCAGCGGGC
'	1377	TATGTCTGGCTCGCCATCAGAAGA
	1378	GGAGTGACCAGCACAAGCATCGAG
	1379	TCGGACTGGAAGTAACTCGCATGA
	1380	GTAGGGTCAAGCACGATTGAAGCC
25	1381	CACCGGCGGTTCGACTAACGTGAC
	1382	GAATGACGCGCAGTGCATTTGAAC
	1383	GTGCTCGTCTAACCGCGGATAGAG
	1384	GCGGACCTGGGTTAATTGACGCGC
	1385	TTTTTGATGTTGCGCACCGGGCTA
30	1386	TTGCGTCAGCGCATCTGCTCGATT
	1387	ATGAGCACGCCAGTTCGTTCCTTT
	1388	TCAACGGTAAAGAATCGCCCCGCA
	1389	CGCGATTGACTGAACCACACCTCT
	1390	GCGTGAAAGATGACGGCCGGTATA
35	1391	CATGATTCCACCTCGATCGGCTAG
	1392	CTACGACAAGCAACCGTGCAAAA
	1393	ATGCCGTGTTCATCTTGATGGTCC
	1394	TTCGTGGAGGGACTTTGGAGATCC
	1395	GAAGCGCCGTAACGTACACCGTCG
40	1396	AGCGTGCGCTTGGCTATAAGGCTA
•	1397	ACAGTCAGGAGTAACGCCGCTCAA
	1398	TTTAGCCGCTGCGACTGTAGGAAA

1399	ACTGTGTCGCAATCAACCCGCAAA
1400	TGCAGCCAATGCGGAACTTAGAGG
1401	CCCGCTATCCCGGTCTTGCAGTTC
1402	GAGGGCGCAACATATGCAGTGCTG
1403	CGTACGGACATCGATGACGCAACG
1404	AGTCTCCCGAGAAACGCATAAGGC
1405	AGGAAGTGGATGAACGCGGCTGCA
1406	GGGTTGCTCACCCTCGTCATCAGG
1407	TAGGAATGCGAGTTCCGGCGGTAA
1408	CTCCTCACTTCCAAGCTGCGGATA
1409	TCAATAGCACCTAGCATGCTCCCG
1410	TGATTCCTGCGCTTTCACAGGTCG
1411	GTATGTGCGGGATGGAAATCACGC
1412	TACGGCAACTGTCGATACGAGGGC
1413	GGTTCCCTATCCAGCACTCCTCGC
1414	ATAAGCGCGCCACAGGTATGTACC
1415	GAAAGTCGCCAACAGACTCGAGCA
1416	CGCTAATGCCTCATAGGCGTGTGC
1417	ATCCCCGCCGCACGAAGTACCAAG
1418	GACGCTGCTGATGGCTTTATCGAT
1419	CTCTCCCGTCGCTTCAGAGATTA
1420	TCATGTGGGCCGTCGTATCAGTTT
1421	GGCCTGAAGGTGAATGGTTACGTG
1422	AGCCTCCAAAGCCGGTAGAGTTCC
1423	TTGTCGTAGGCGCTCACCTTAGGA
1424	GCCTGAGTCCGGGTCGGGAAAGAA
1425	GGCACTATACCGGTTCTGGACGCG
1426	CCGTGTATACGGAAAGGTACGCCA
1427	CCCAAGGCAAGTGTGCATCAGTCC
1428	GGAGTGCATCATGGCCAAATCTGG
1429	CCATGTTACGTCTGCGCACCACAG
1430	GGCGTTGAGCTTAAAAGCAGCGAC
1431	TTGGCACTCTGCAAGATACGTGGG
1432	GATCTGCACTGCAAGGTCTTGGGG
1433	CGATCAACTTGCGGCCATTCCTGC
1434	CGGCTGGGGTCACAGAAACGAGTA
1435	GCGGCTAGTTGTACCTAGCGGCTG
1436	TCGTCACTGTTAGAGAGGCCTCCG
1437	AGTGTCGTGAGCCCTAGCGGCGCT
1438	AGGACGCAGGGATTCAAGTGCAAC
1439	ACCGATGCGCGGTCGGTCTCATAC
1440	GGCAGAGGGTTAGGGGGTTTTTTT

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1441	GGCAAAGGGTGTTTATGGGAGACC
1442	ACAAGGCTTCGGCTGGCAGAATAC
1443	CATATCCGTTCCTATCGCCAGACG
1444	AAGCCTTTGTGGCCAAGGCCGCGT
1445	CCGAACCATGGCTTTATCCAGTGT
1446	GTTCAGCAGTAGCTCCCTCCTCGA
1447	GCGCAGTGACACCATGATGCTTTC
1448	ACGATCCATTTTGCCAGCATGCAA
	TCCCTTCATTTCGGGTTTTTAGCC
1449	TCTTCTTGCCCACATTCCCTTTTG
1450	TGCCTTTTGATTGGTGGTCACGGT
1451	GACCTCACGGTCATCAGAGGGAG
1452	CCGTTCAACACAGTGATACACGCG
1453	CACCAGGGGATAGGTGCGGTACGC
1454	GGTCGGAACTGATCTGTGCGATCC
1455	
1456	TGCTCCTTCCTAGGGTCATCCGTG
1457	GTGGACTTTGACGCCGGCTACCGC
1458	CTGATCTGTCGGCGGTTACTTGCC
1459	AGAGGAGCGAAAAAACCGGACGA
1460	GCGACGAAGATCCAGCAAGCTC
1461	GGGACTTCCAGCTGAGGGACGAAA
1462	GGCGCACTCCAATACCCACTGTTT
1463	GCGCTTGGAGACTGTCAGGACGTG
1464	CAAACCGCTGGTTTCTCCACCTGT
1465	GCGATTGCTTGGGATCGGTGACTA
1466	CTCAGCGACATTTTTCTGGTGGCG
1467	CAGCGGCGTCGTTTACTCAGGACT
1468	GACAGCCGTGAACGCTCAGCCGTT
1469	GGGCCGTAGAGGCATCGGGTAAAG
1470	CGCCGCTCACCTGCTTAAAGCATT
· 1471	TGCCAAATCGCAACTCTTGAGACA
1472	CCCCGATCGGGTGTAATTCTCCCT
1473	CAAGGTCCAGGTGACGCAACCACT
1474	CGAGCCTTCAGTGGTATGCATGCG
1475	CAGCAGCGTGCCCATCTCGACTTA
1476	CGGACCAAGATGGCAGTAATCCAG
1477	CTACCACGCTCTGCGCGGGCTGTA
1478	ACGTGGTTAGGCATGAGCTGCGTC
1479	CGACATATCCGACATGACCGGATG
1480	GCGCCCAGGCTGTTAGAAAATA
1481	AGCTGGGACTCCGGACCTTGAGTG
1482	CGGTCGTAACCGCTGCTACAACTT

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1484	ſ	1483	TCGTTCCTCTGGAACAATTCAGCA
1486 TGCAAGGGAGAAAGCCCCATGAGC 1487 ACTGCATAGCCCAGATCCGCTTGC 1488 TGTGATTCAGTCGAAGCAAGGCCG 1489 CATCCATCACATTCGGAGCAAAGACCA 1490 ATGAGCCGTTCAGAAGCAAGACA 1491 ACACTGGAATTCAGAACCCAGCG 1492 CTGAGCTGCGTGGAACACTCCGC 1493 CAGCTACTAGGGCGGATGTACCC 1494 ATAATGATGGGACGACAAGACCCCC 1495 CGACCGAGTTACGACACGACAGACCCC 1495 CGACCGAGTTACGACAAGACACTCGC 1496 TGCAGTACCCGCCGCTCCACTAGT 1496 ATGATCACCGCCGCTCCACTAGT 1497 ATGCTAGCGCGCCTCCACTAGT 1498 AGACTCACTGCCGGCTCCACTAGT 1498 AGACTCACTGCCGGCTCCACTAGT 1499 GCCTGGTGCGAAGATAGGGATTCC 1500 GGAAACTTGGCGGACTACAAT 1499 GCCTGGTGCGAAGATAGGGATTCC 1501 GGCAGTGAGCAATGTGTGACGAGG 1502 TGAGGTCCTCCCGGCGGACTACGA 1503 CTCGCCTTAGATCGTGACCAGG 1504 GTCGAGGAATACTGTCCGCA 1505 GCGAATGCAACGAGACAAGAAGA 1506 TTCGCCACCAAGTCGGCATTTCTT 1508 CAAGGAGCAATTCAGCAGCACT 1508 CAAGGAGCAATCAGATGGTCGGACT 1510 CTCTCGCCCACATAACTGCAGAA 1511 AAACCTGCCTAACATGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1514 TTAGTGTTGCGGAATACTGCG 1514 TTAGTGTTGCGGCATTCCCGGCGATGC 1515 CTTGTTGCGCAATACTGCG 1515 CTTGTTGCGCAATACTGCG 1515 CTTGTTGCGCAATCACTTGCGGAACCCCGGCCGATGC 1515 CTTGTTGCGCAAGCAGCACCCCGGCAACCCCGGCCGAATACTGCG 1515 CTTGTTGCGCAAGCAGCACCCGGCCGAACCCCCGGCAACCCCGGCCAACCCCGGCCGAACCCCGGCCGAACCCCGGCCGAACCCCCGCCCGAACCCCCGCCCAACCCCCGCCCAACCCCCGCCCAACCCCCGCCCAACCCCCC	Ī	1484	CGGCATCTCCGGACAAAGGTTAAC
5 1487 ACTGCATAGCCCAGATCCGCTTGC 1488 TGTGATTCAGTCGAAGCAAGGCCG 1489 CATCCATCTACAATTCGGGCCAGT 1490 ATGAGCCGTTCAGAAAGCCAAAGA 1491 ATGAGCCGTTCAGAAAGCCAAAGA 1492 CTGAGCTGGGTGGGACAACTCCGC 1493 CAGCTACTAGGGCGCGATGTACCC 1494 ATAATGATGGGACGAGAAGGCCCC 1495 CGACCGAGTTTACGACATGGTGC 1496 TGCAGTACCCGCGCTCCACTAGT 1497 ATGCTAGCCGCGCTCCACTAGT 1498 AGACTCACTGCCGCGCTCACACGT 1499 GCCTGGTGCGAAGATAGGGATTCC 1500 GGAAAGTTGGCGGATCCGAGCAT 1501 GCCAGTGAGCAATGTGTGACGAG 1502 TGAGGTCCTCCCGGCGACTACGA 1503 CTCGCCTAGACATTGTTCCGCA 1504 GTCGAGGAATTCATCGCAGCAG 1505 GCGAATGCAACGAGACAAGAAGA 1506 TTCGCCACAAGTCGGCATTCTTGTT 1507 CGGTGGCTCGTTCTAGCTGTG 1508 CAAGGAGCAATCAGATCGGCAGATTC 1509 GTGACCGGTCCGTTCTAGCTGCG 1510 CTCTCGCCCACATAACTGCACAA 1511 AAAC		1485	TATCTTGTCGAGCGCCACTCGGAG
1488 TGTGATTCAGTCGAAGCAAGCCG		1486	TGCAAGGGAGAAAGCCCCATGAGC
1489	5	1487	ACTGCATAGCCCAGATCCGCTTGC
1490 ATGAGCCGTTCAGAAAGCCAAAGA 1491 ACACTGGAATTGCTAGACCCCGCG 1492 CTGAGCTGCGTGGGACAACTCCGC 1493 CAGCTACTAGGGCGCGATGTACCC 1494 ATAATGATGGACGAGAAGGCCCC 1495 CGACCGAGTGTACGACATGGTGC 1496 TGCAGTACCGGCGCTCCACTAGT 1497 ATGCTAGCGCGCCTCTCAACGTAC 1498 AGACTCACTGCCGGCTGCACATAGT 1498 AGACTCACTGCCGGCTGTCAACGTAC 1499 GCCTGGTGCGAAGATAGGGATTCC 1500 GGAAAGTTGGCGGATCCGACCACT 1501 GGCAGTGAGCAATGTGTGACGAGG 1502 TGAGGTCCTCCCGGCGGACTACGA 1503 CTCGCCTTAGATCGTGGTTCCGCA 1504 GTCGAGGAATATCATCGCAGCCAG 1505 GCGAATGCACACAAGAAGGA 1506 TTCGCCACCAAGTCGGCATTCTT 1507 CGGTGGCTGACACTTGCCGGACTTC 1508 CAAGGACCATCAGATGGTCGGAG 1509 GTGACCCGGTCCGTTCTAGACTGTG 1510 CTCTCGCCCCAATACTGCAGCAA 1511 AAACCTGCCTAACACACAAA 1511 AAACCTGCCTAAGCACTGGA 1512 TTCCATATTGTACCCGCGCCTTCC 1513 TGCTTGCGGATCCGTTGCGGA 1516 GTCAGCTGCTGTGGCCGCCCGCCCTTCC 1515 CTTGTTCGCGGATCCGTCTTGGA 1516 GTCAGCTGCTGTGGCCTTCCGCGCCCTTCCCTCTGGGACCCCGCCCTCCCT		1488	TGTGATTCAGTCGAAGCAAGGCCG
1491 ACACTGGAATTGCTAGACCCCGCG 1492 CTGAGCTGCGTGGGACAACTCCGC 1493 CAGCTACTAGGGCGCATGTACCC 1494 ATAATGATGGGACGAGAAGGCCCC 1495 CGACCGAGTGTTACGACATGGTGC 1496 TGCAGTACCGCCGCTCCACTAGT 1497 ATGCTAGCGCGCCTCCACTAGT 1498 AGACTCACTGCCGGCTCCACTAGT 1498 AGACTCACTGCCGGCTGCAACAT 1499 GCCTGGTGCGAAGATAGGGATTCC 1500 GGAAAGTTGGCGGATCCAAAT 1499 GCCTGGTGCGAAGATAGGGATTCC 1501 GGCAGTGACCATACGA 1502 TGAGGTCCTCCGGCGACTACGA 1503 CTCGCCTTAGATCGTGTACGAG 1504 GTCGAGGAATATGGTGCGAA 1505 GCGAATGCAACGAGACAAGAAGAA 1506 TTCGCCACCAAGTCGGCATTCT 1507 CGGTGGCTGACACTTGCCGGATTC 1508 CAAGGAGCAATCAGATCGTGGAA 1509 GTGACCCGGTCCGTTCTAGCTGTG 1510 CTCTCGCCACCAATACTGCAAAA 1511 AAACCTGCCTAAGCAAGACACAAA 1511 AAACCTGCCTAAGCAAGACACACAA 1511 AAACCTGCCTAAGCAAGCACTTGGA 1512 TTCCATATTGTACCCGCGCATGC 1513 TGCTTGCGAATCACTGCCGA 1514 TTAGTGTTCGAGCCTGC 1515 CTTGTTGCGCGAGTCCTTTC 1516 GTCAGCTGCTGTGTGCTCTTC 1517 CATCCCTCAGGTTAGCCACAACAC 1518 CAAGACCACCATACTGCCGAACAC 1519 CTGAGCCTCCGGAGGTTCCTTC 1519 CTGAGCCTCCGGAGGATTCAG 1519 CTGAGCCTCCGCACGGATTCAG 1519 CTGAGCCTCCGCAAGCACACCATACCGCCATTCAGCCGCC 1511 CATCCCCCGCGAACCCCTCCGCAACACAC 1512 ACACCAACCATACCGCCGCATTCC 1513 ACACCCACCATACCGCCCGCATTCC 1514 CACCCCCGCGAACCCCTCCGCAACACCATACCGCCCGCATGC 1515 CTTGTTGCGCGAGTTCCGTCTTC 1516 CTCCCCCCACAGGCTCCGTCCTTCC 1517 CATCCCCCGCGAACCCTCCGCACGCCCCCCCCCCCCCCC		1489	CATCCATCTACAATTCGGGCCAGT
0 1492 CTGAGCTGCGTGGGACAACTCCGC 1493 CAGCTACTAGGGCGCGATGTACCC 1494 ATAATGATGGGACGAGAAGGCCCC 1495 CGACCGAGTGTTACGACATGGTGC 1496 TGCAGTACCCGCCGCTCCACTAGT 1497 ATGCTAGCGGCCTGTCAACGTAC 1498 AGACTCACTGCCGGCTGATCAAAT 1499 GCCTGGTGCGAAGATAGGGATTCC 1500 GGAAAGTTGGCGAGCAAT 1501 GGCAGTGAGCAATGTGTGACGAGG 1502 TGAGGTCCTCCCGGCGGACTACGA 1503 CTCGCCTTAGATCGTGGTTCCGCA 1504 GTCGAGGAATATCATCGCAGCCAG 1505 GCGAATGCAACGAGCAAGAAGA 1506 GTCGACCACAATCAGCACTTGCTGATTC 1507 CGGTGGCTGACACTTGCCGGATTC 1508 CAAGGAGCAATCAGATGCTGCGAG 1509 GTCACCCGGTCCGTTCTAGCCGGA 1510 CTCTCGCCCACATAACTGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCGCGCCATGC 1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTTTCGAGCCTTCAGCCGCGC 1515 CTTGTTTCGAGCCTTGAGCCGCGC 1516		1490	ATGAGCCGTTCAGAAAGCCAAAGA
1493		1491	ACACTGGAATTGCTAGACCCCGCG
1494	0	1492	CTGAGCTGCGTGGGACAACTCCGC
1495	[1493	CAGCTACTAGGGCGCGATGTACCC
1496 TGCAGTACCCGCCGCTCCACTAGT 1497 ATGCTAGCGCGCCTCTCAACGTAC 1498 AGACTCACTGCCGGCTGATCAAAT 1499 GCCTGGTGCGAAGATAGGGATTCC 1500 GGAAAGTTGGCGGATCCGAGCACT 1501 GGCAGTGAGCAATGTGTGACGAGG 1502 TGAGGTCCTCCCGGCGGACTACGA 1503 CTCGCCTTAGATCGTGGTCCGCA 1504 GTCGAGGAATATCATCGCAGCCAG 1505 GCGAATGCAACGAGCAAGAAGAAGA 1506 TTCGCCACCAAGTCGGCATTCT 1507 CGGTGGCTGACACTTGCCGGATTC 1508 CAAGGAGCAATCAGATGGTCGGAG 1509 GTGACCCGGTCCGTTCTAGCTGGA 1510 CTCTCGCCCACATAACTGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCGCGCCATGC 1513 TGCTTGCGATACTGCG 1514 TTAGTGTTCGAGCCTTCAGCCGG 1515 CTTGTTGCGCGAGTCCTTTC 1516 GTCAGCTGCTTGAGCCGGC 1517 CATCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCGAGGGATTCAG 1519 CTGAGCCTCGCGAAGCTTCAG 1510 GTCAGCTCCGCGCAACACC 1511 CATCCTCGAGGTGTAGGCAACAC 1512 CTGAGCCTCGCGAAGCTTCAG 1513 CTGAGCCTCGCGCAACACC 1514 CAGATGCACTCCGACGGGATTCAG 1515 CTGAGCCTCGAGGGATTCAG 1516 GTCAGCTCCGACGGGATTCAG 1517 CATCCTCGAGGGTGTAGGCAACAC 1518 CAGATGCACCCGCCGCAGATAGAGC 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 40 1522 GCCCAGAGCTAAGCATGCTGCGCAACACACACACATACCGTCCGT		1494	ATAATGATGGGACGAGAAGGCCCC
1497 ATGCTAGCGCGCCTGTCAACGTAC	'	1495	CGACCGAGTGTTACGACATGGTGC
1498		1496	TGCAGTACCCGCCGCTCCACTAGT
1499 GCCTGGTGCGAAGATAGGGATTCC 1500 GGAAAGTTGGCGGATCCGAGCACT 1501 GGCAGTGAGCAATGTGTGACGAGG 1502 TGAGGTCCTCCCGGCGGACTACGA 1503 CTCGCCTTAGATCGTGGTTCCGCA 1504 GTCGAGGAATATCATCGCAGCCAG 1505 GCGAATGCAACGAGACAAGAAGGA 1506 TTCGCCACCAAGTCGGCATTTGTT 1507 CGGTGGCTGACACTTGCCGGATTC 1508 CAAGGAGCAATCAGATGGTCGGAG 1509 GTGACCCGGTCCGTTCTAGCTGTG 1510 CTCTCGCCCACATAACTGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCCGCGCATGC 1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTGTTCGAGCCTTGAGCCGGC 1515 CTTGTTGCGCAGTCCTTCTGGA 1516 GTCAGCTGCTGCTGTGGTGCTCTTC 1517 CATCCCTCGAGGTGTAGCCACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCAGAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAGCATCTCGCG 1523 AATGCTGCAATGCTACCGTC	15	1497	ATGCTAGCGCGCCTGTCAACGTAC
1500 GGAAAGTTGGCGGATCCGAGCACT 1501 GGCAGTGAGCAATGTGTGACGAGG 1502 TGAGGTCCTCCCGGCGGACTACGA 1503 CTCGCCTTAGATCGTGGTTCCGCA 1504 GTCGAGGAATATCATCGCAGCCAG 1505 GCGAATGCAACGAGACAAGAAGGA 1506 TTCGCCACCAAGTCGGCATTTGTT 1507 CGGTGGCTGACACTTGCCGGATTC 1508 CAAGGAGCAATCAGATGGTCGGAG 1509 GTGACCCGGTCCGTTCTAGCTGTG 1510 CTCTCGCCCACATAACTGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCGCGCATGC 1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTGTTCGAGCCTGGAG 1515 CTTGTTGCGCGAGTCCGTCTGGA 1516 GTCAGCTGCTGGTGCTCTTC 1517 CATCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGAGGGATTCAG 1519 CTGAGCCTCCGAGCGGATTCAG 1520 GCTATGCCACGCAGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGCTCGGG 1523 AATGCTGCAATGCGTCGCTA		1498	AGACTCACTGCCGGCTGATCAAAT
1501 GGCAGTGAGCAATGTGTGACGAGG 1502 TGAGGTCCTCCCGGCGGACTACGA 1503 CTCGCCTTAGATCGTGGTTCCGCA 1504 GTCGAGGAATATCATCGCAGCCAG 1505 GCGAATGCAACGAGACAAGAAGGA 1506 TTCGCCACCAAGTCGGCATTGTT 1507 CGGTGGCTGACACTTGCCGGATTC 1508 CAAGGAGCAATCAGATGGTCGAGA 1509 GTGACCCGGTCCGTTCTAGCTGTG 1510 CTCTCGCCCACATAACTGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCCGCGCATGC 1513 TGCTTGCGATACTGCG 1514 TTAGTGTTCGAGCCTTGAGCCGGC 1515 CTTGTTCGAGCCTTGAGCCGGC 1516 GTCAGCTGCTGTGGTGCTCTTC 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGAGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCACCATCCGTCCGTTCA 40 1522 GCCCAGAGCTAAAGCATGCTCGCG 1523 AATGCTGCAATGCTTGCGCA		1499	GCCTGGTGCGAAGATAGGGATTCC
1502 TGAGGTCCTCCGGCGGACTACGA 1503 CTCGCCTTAGATCGTGGTTCCGCA 1504 GTCGAGGAATATCATCGCAGCCAG 1505 GCGAATGCAACGAGACAAGAAGGA 1506 TTCGCCACCAAGTCGGCATTTGTT 1507 CGGTGGCTGACACTTGCCGGATTC 1508 CAAGGAGCAATCAGATGGTCGGAG 1509 GTGACCCGGTCCGTTCTAGCTGTG 1510 CTCTCGCCCACATAACTGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCCGCGCATGC 1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTGTTCGAGCCTTGAGCCGGC 1515 CTTGTTGCGCAGTCCTTCTGGA 1516 GTCAGCTGCCTGCTGTGCTCTTC 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCCGACGGGATTCAG 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTACCGTA		1500	GGAAAGTTGGCGGATCCGAGCACT
1503 CTCGCCTTAGATCGTGGTTCCGCA 1504 GTCGAGGAATATCATCGCAGCCAG 1505 GCGAATGCAACGAGACAAGAAGGA 1506 TTCGCCACCAAGTCGGCATTTGTT 1507 CGGTGGCTGACACTTGCCGGATTC 1508 CAAGGAGCAATCAGATGGTCGGAG 1509 GTGACCCGGTCCGTTCTAGCTGTG 1510 CTCTCGCCCACATAACTGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCCGCGCATGC 1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTGTTCGAGCCTTGAGCCGGC 1515 CTTGTTGCGCAGTCCGTCTTGGA 1516 GTCAGCTGCTGTGTCTTCC 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 40 1522 GCCCAGAGCTAAAGCATGCTCGGC 1523 AATGCTGCAATGCTACCGCAA		1501	GGCAGTGAGCAATGTGTGACGAGG
1504 GTCGAGGAATATCATCGCAGCCAG 1505 GCGAATGCAACGAGACAAGAAGGA 1506 TTCGCCACCAAGTCGGCATTGTT 1507 CGGTGGCTGACACTTGCCGGATTC 1508 CAAGGAGCAATCAGATGGTCGGAG 1509 GTGACCCGGTCCGTTCTAGCTGTG 1510 CTCTCGCCCACATAACTGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCCGCGCATGC 1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTGTTCGAGCCTGGGA 1515 CTTGTTGCGCGAGTCCGTCTGGGA 1516 GTCAGCTGCTGGTGCTCTTC 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCCGCAAGCTTCAG 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAGCATCTCGGG 1523 AATGCTGCAATGCTAGCCTA	20	1502	TGAGGTCCTCCCGGCGGACTACGA
1505 GCGAATGCAACGAGACAAGAAGGA 1506		1503	CTCGCCTTAGATCGTGGTTCCGCA
1506		1504	
1507 CGGTGGCTGACACTTGCCGGATTC 1508		1505	
1508	{	1506	
1509 GTGACCCGTTCTAGCTGTG 1510 CTCTCGCCACATAACTGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCCGCGCATGC 1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTGTTCGAGCCTGGA 1515 CTTGTTGCGCAGTCCTTGGGA 1516 GTCAGCTGCTGGTGCTCTTC 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTC	25	1507	
1510 CTCTCGCCCACATAACTGCACAAA 1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCCGCGCATGC 1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTGTTCGAGCCTTGAGCCGGC 1515 CTTGTTGCGCAGTCCGTCTGGGA 1516 GTCAGCTGCCTGCTGGTGCTCTTC 35 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA		1508	
1511 AAACCTGCCTAAGCAAGCACTGGA 1512 TTCCATATTGTACCCCGCGCATGC 1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTGTTCGAGCCTTGAGCCGGC 1515 CTTGTTGCGCAGTCCGTCTGGGA 1516 GTCAGCTGCCTGCTGGTGCTCTTC 35 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA		1509	
1512 TTCCATATTGTACCCCGCGCATGC 1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTGTTCGAGCCTTGAGCCGGC 1515 CTTGTTGCGCGAGTCCGTCTGGA 1516 GTCAGCTGCCTGCTGGTGCTCTTC 35 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGCAA		1510	
1513 TGCTTGCGATATCACGATACTGCG 1514 TTAGTGTTCGAGCCTTGAGCCGGC 1515 CTTGTTGCGCGAGTCCGTCTGGGA 1516 GTCAGCTGCCTGCTGGTGCTCTTC 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA		1511	
1514 TTAGTGTTCGAGCCTGGCC 1515 CTTGTTGCGCGAGTCCGTCTGGGA 1516 GTCAGCTGCCTGCTGGTGCTCTTC 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA	30	1512	
1515 CTTGTTGCGCGAGTCCGTCTGGGA 1516 GTCAGCTGCCTGCTGGTGCTCTTC 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA	·	1513	
1516 GTCAGCTGCTGGTGCTCTTC 1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA		1514	
1517 CATCCCTCGAGGTGTAGGCAACAC 1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA		1515	
1518 CAGATGCACTCCGACGGGATTCAG 1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA		1516	
1519 CTGAGCCTCGCGAAGCTGTGGCAT 1520 GCTATGCCACGCCGCAGATAGAGC 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA	35	1517	
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40 1521 AACACCAACCATACCGTCCGTTCA 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA		1519	
40 1522 GCCCAGAGCTAAAGCATGTCTGGG 1523 AATGCTGCAATGCTAGCGTCGCTA	•	1520	
1523 AATGCTGCAATGCTAGCGTA		1521	
TO A	40	1522	
1524 TCCGGACGCAGTATCCGGA		1523	
		1524	TCCGGACGCAGTATCCAATCCGGA

٠ [1525	TAAGACCATGTGGCACCAAGGTGC
ł	1526	ACAGCCACACACGCGCCCACTA
	1527	TAGAACCGAGCACGGCGCCTTGTA
	1528	TTCGAGTAAGCTGGCAGGACCACT
_	1529	CTTTCGCAGGTTCGCAGACAATCC
5	1530	TACGTCCTGTGCTGTTGACACCGG
	1531	GTTCGGGTCAATGTTTCGGGGAGA
	1532	CCCTGTTGTGAAGGGGTTTTGTGA
	1533	GGCAGATTGGTGAACCCCAGATAA
0	1534	CCCTCGGTGTGTTCAAGCCAAATC
0	1535	CCCGCGAACATTTGAACAGCTTAA
,	1536	CCGTGTCAGTTGCTCCCTGGCACG
	1537	TCCGTCTCAGCCGCCTCCCTATCC
	1538	ATAGCTGGGTCACCACAGGCGGTC
ıc	1539	ATAGGCAAGCGGTGTAGCACAGCG
15	1540	TTAGAAGCCGGTCTGGATTTGCGT
	1541	TGCCGACCTTTACCAGGATCCTCG
	1542	GCCCACACTATAACCAAGCTGGCA
	1543	TTGCGCCACTAGTACGGATCTCAA
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	1546	CCCGTATGCGGAAGCTATGGGCTA
	1547	TCGTTCAACCCCACACTTCAGTTG
	1548	CAATGTGGGGGACATTTCAAGGTT
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25	1550	GGTGGCTTCGTGACAATATCGGCC
	1551	CAGCGGCGTCCGAAATTGGCTCTC
	1552	GGCTTGCTCTCGTTTTTGATTGCA
	1553	ATGCGAGGAGGACACGACCGTTCC
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	1557	CAGCCGAAAGGAAAGCCTCCGTG
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	1560	TGAGGGAGAACCCGAAATCTGCTT
	1561	GGCGACTACATCCCCAATTGCTTG
	1562	GCAGACGCGGCCTTCCATACTTTT
	1563	ACAACCACATGACGTGTAGCTGCA
40	1564	CTGCTGGGCGCGCAAAGCTTGTTG
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	1566	TACCTGCTGCCTGGAGCAAGGCAT

F		
	1567	GACGCCGCAGCCATGAGTGAGTGT
	1568	AGTTGGCCGCTTATTTTGCTCACC
	1569	AGGCGCACGGAGAACATTTGCCAA
	1570	CCAGGCGCCTTCGACAGATCCTCA
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	1573	CTACACCGCTCGTGACTCGGCAAA
	1574	TGGTGCCATCAAAGCACGTTGTAC
	1575	ACAATGCGTGTTGCGAAACGCATA
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	1577	ACGAGAGATAGCGGACTCCTCCGA
	1578	AGCTTTGTCGTCAGGCGAGCTCTT
	1579	GACAGTCGGCGTGCAGTTTGTTGT
	1580	AGCTAGCGACGGCCAACTCACGTA
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	1582	ACTGACCGACGCAGTGCCACATAG
	1583	AGGTAGGGTCTGGTTTGACTCGCA
	1584	CCTCCATTTTAGCGCGTTGCCAAT
	1585	TTCTTAGGATCCGCGCACTCTTGG
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	1587	GTCACTCGGCGGCCCAATCACTCG
	1588	TCTCGGTCACCCGTCTTGACCCTT
	1589	GCCCTCGACGAACTCATCCTGAAC
	1590	TCCGGCGTACTCTGACACGGCGAT
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	1592	ACTCCACGCCGCATGTTGCTGTGA
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	1594	GGTCTTGGGCCATCGACTTGCTGC
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	1692	GGCATAGCAAACCTTGACCTCCAA

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ſ	1693	ATCTGGGATTCGCGAGCCAATATC
	1694	CGATCAGGATATCATTTACGCCCG
Ţ	1695	ACGGTACCGAAACGGTCTCAGCGT
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	1734	TCATTAGTGCAGGCACCGATCAAG

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	1748	AGTACCGCTACAACGCTGGTTCGC
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	1750	CCACTTCTGTGACCGAACCGTGCT
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Γ	1777	GCCAAACAACGTCTGACGCCTAGC
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	1779	TTATCGGCCGTTAAAATGGGATGG
Ī	1780	CCTTGGATTCGTTCATCGCTAGCA
5	1781	AAGTGAACGTGCAGTGGTCTTCGA
·	1782	TCCTTACCCCTCGTTCAAACGCCT
Ī	1783	ATTCCTGAACCATGCATGGCCTGT
Ī	1784	AGCGAGACGCTCGATCACGAACTA
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	1787	TCTGGCACTCACATCGGACAGTCT
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Ţ	1789	TCCAGGGTCGGAGTACATGGCGGG
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Ī	1793	CATGGACTGCCGTACATCAGCTGG
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·	1849	TGCTCACTGCCCACACTGTTATGG
	1850	CGAGGAAACACATTTCTTCGGGCC
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	1855	ATGGCGTGTCAGCGAACTGCCTGG
	1856	CAATGCAGCTCGGAAGTCAGGTCG
	1857	AGGATCAGTGCACATGTCCCCTCA
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	1860	ACATCCGCAGACTCCCTATAGCCC
		

1862 GCGTAGGGAATTTGCCTCACGACT 1863 TTTACGCGTCGCTCGGTTGTAGTG 1864 GAGAGGCGTCTAGGCGGTTCTAGC 1865 GCATGCTGATAACGAATGCTTCCC 1866 CTGAAGCTCGTGTGCGATGAGGGA 1867 ACAACGGCATGAGGAGGCTTTTTC 1868 TTTGGAGACGCCAGTACGCGTGGT
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1966	GTCCACGTGACCACGGATAGTTGG
1967	GATTATGCTCCTACGCCTGCTCCG
1968	TCGTCAAGGGCATGATGTGTGGGA
1969	GATGGACCGCCAAAGACACCTTGA
1970	TACACGAGGATGGGGTCAAGCTTT
1971	ACACGCACAAAACGTTTGAAAGGC
1972	GTTATCGTGGGCCGATGGTACTGA
1973	ACATGACCGTATCCGCCTGCTTCG
1974	GAAGGCGAACCACTGAAACTACGC
1975	TGACTTTTGCAACGGGTGGAACCA
1976	TGAATTCGTAGGTTTTGGGTGCGG
1977	AGCATTTATGAAGCGGCCATTGCG
1978	TGCTCCTCGCGTTGGTACCGTGAG
1979	CGCAGCAAGAACAGCAACTGTTG
1980	AGACGCTTGGAGTGAAAACTCGGA
1981	CATTCGTAGAATGCCCCAAATGGA
1982	CCAGAAGGTTCGGGACCCGTCGTG
1983	GAGAAGCCGGTTCTCAGAGCACAT
1984	TTGCGTTGCAAGATATCTGGCCCG
1985	GGGTTGCATGTTCAGGCAAGACGA
1986	CTCACGAAGGTGACATATCACGCC

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	1987	GCCCGAGATACGGGTTCAAAAAGA
	1988	CATCTTCGCGCTTCTTCACTCCGC
	1989	TTACACGGTAAGCGTACGGCCGCC
	1990	ACCTTCGGACAATGTGGCGTTCGC
5	1991	TGAATGGTTCTGCTAGGCCCACAC
	1992	CACGCCTGTCTGACATATGGATGC
	1993	CGCCTCAACCCAATCTGAGAACGT
	1994	TTACGCTTACTGCGAGCTGGGTCC
	1995	GGCTTGTGGGGCAATACGCATCTT
	1996	CACTCTCCTTTGGATGCGGAACAA
	1997	CTTCGAAGCACTTCAGACTTGGGC
	1998	GACCAGCCATCACGTAACGGCCCT
	1999	AGGAACCGGATGTGGTTATGGAGC
	2000	ATCCATGGGCAACTGAGCCTATGC
15	2001	GGAACAGCACTTGTTACCGCCCAC
10	2002	TGGCTCGCTTCAAGCCTGTTTGCT
	2003	CAAACGTGAGGTCATGACCACCAT
	2004	ACCGATGTCTTGAAGTCCGGAGGT
•	2005	CGAAAATGCATGATGATCTCCCCT
20	2006	TTTGGTATTCTCGCTGCACCGTTG
20	2007	GCGTACTCAACCACATTCCCGACC
	2008	AGCAAACAACAGCGGTCCGAGCAT
	2009	GGACTAGGAGCGGGGATAGCTGAG
	2010	CCTTAACGAAAACCTGTCGACCGC
25	2011	CTCGATCGCATAAGCAAGAAACCG
23	2012	CCCGTTGTTTGGGCGACAAAAAGT
	2013	CGGCGGCTCTCGCATGATCTCGTT
	2014	CGGATGGAGAGGAGTCTACGTCCC
	2015	ACCAAATCAGACTAGCGACTGCGG
30	2016	CAGAACAATATCGTGCGTCAACCG
30	2017	CCTTTGCGCGCTCCGAGTAAGGTA
	2018	GGAAACGGCACCTATCTGTCGTGA
	2019	CGACCGACAAAACCAAATGCCGCC
	2020	CCAAGGGTGTGGGAGCTGAAGAGA
35	2021	TTAAGTGCGCATAGTCCTCGTGGG
33	2022	GCCTGGTGGGGTAAGTCATGATGC
	2023	GAGCAGCAGATTGATGCGCTTATG
	2024	TGCGCCAACTTCCGGAATATTTGC
	2025	AACCCCATCATGAAATGCTCTCCG
40	2026	GTCCAACGGTACTGGCGTGATGTT
4U	2027	ACTCGGCTGATCGTGAGATGGTGA
•	2028	ATTCGTGGGCGCATCTCGGAATGT
	2020	1,

2029	TCCCGTCCTGTAATCCAGGGAACA
2030	CTTCGCTGCACCTACATTGCGCCA
2031	GCGTGTAGATGACTGTGCTTTGGG
2032	CTATGGTATCGAGACATCGGCGGA
2033	CCTCGTACTCCGTCGTATGCACAA
2034	TGGTGCGTCCGTAGTGCCTGCACT
2035	CGCGATCCTAGTTGAAAGCTTTGC
2036	ACGATCCAGGTGTTGGGCACTAAG
2037	CCAATCTAGGATACACCACGCCCG
2038	GATACGTGGGGTATAGGCGGGCCC
2039	CATGGAACAACCGTCGTAGGGGA
2040	ACACTCGCGCAGTATTCGAGTCGT
2041	CTCAGTCTCGAAGGTGATCCGACC
2042	TCCCAATCCCCGTGGTATCGTCGT
2043	AATCAACGTAGTTCCGGTGGTCCG
2044	CTTAACAACCCAGGGGTTTGGGCT
2045	CCATCCTGAGAGTGACGGAGGTGC
2046	CTACCGCTGCATGGCGTTAGATTG
2047	TTATTGGTGGCGGACGGAGTGAGT
2048	TTAAGGGTGAACTCAACCGCGTGA
2049	TTTGATTGAAACGCTGCGCACTAC
2050	TCATGTGTAGGTCGCGGCCGTCAC
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2053	CACGATCGCTGAGCAACACATCAC
2054	CGGATCATAAGCGTCCGCCTTCGT
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2060	GCAGGCATGACAGTGGCGTAGTAC
2061	GCGGCCTGATGGTTTGGCTGAGC
2062	TCCCCATTTAGTCCCCTCCATCAC
2063	GCAACACAAATGCGAGCGTAGGAG
2064	GGCGTTTGTATTCGAGCCACGTAG
2065	GGTAACGTCGCACGTGGAATTCCG
2066	ACTTCACAACGCTCCGTTGGACAC
2067	CCGAATTATAAAGCGCAAGGCACA
2068	GGACCCGATAAGACTCTGACGCCG
2069	ACCCGTTTCTCGTAGGAACCTGCT
2070	CACGTTCGACTGTATCTGGTTGCC

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•	2071	CCTCGGATGGCCCATGACCTTGA
	2072	GGACGCCTGCTGTAGGGGTTTGAT
•	2073	CTCGAGCGTGGGCTAAAAGAGCAT
	2074	TTTACTTCTTAGGGCGCGTTTGGG
	2075	ACCACCAACATAGCGCGCACTAGT
	2076	TGGTTACACGGCAGCCCGCGTAAG
	2077	TTATGGTACGTTGCTGCGGG
	2078	ACCGCGGATCTAACGAATCCCATT
	2079	CATGATCCCGCCCTTAGGTTAAGC
	2080	TACCGCTTCAAAGGGTTGCCGAAT
	2081	GCACCGCGTCAATATTACCGAGGA
	2082	GTGTCGCGGCTTTACAGAAGGAGA
	2083	GCAAGCCATACCGCAATAAACTCG
	2084	ATGAGGTCGTGCTGCGTTCACGAG
	2085	CGAGACTAGTGCCGATGCAGGGTA
	2086	GCCTCATCATAGACGCTGGATGCA
	2087	GACAGGCGTCGGTAAGCTCTCAAG
	2088	GCTACGAATCTTCCCTGTCGCCAC
	2089	TTTGGCAGAACGTACCAGTGGGGT
	2090	GGACAATAAGCACCGGAGAATGCG
	2091	TCATGAACCTTCTGATGCCGCGAA
	2092	CGCCGCATTACCTTAAAAACGTGC
	2093	ACGAGTCCAACCGCCTCATTGATT
	2094	GCGAAGAGTTGCTACTCTTCCGCC
	2095	CGTCGGCAACAATCTTTTTCGTGA
	2096	AATCCTGTGCACCCGTGAGACGCG
	2097	AACCTATATGCATCAACGCGAGCC
	2098	GAACTTGGCAAAACAGCCCGGAAA
	2099	CTCTATGGCCGTTTGCCGTCTGCA
	2100	AGTGCACCGGGTTGTGGACACAAT
	2101	CCTGGCTTTTCACACGCCAAGAAA
	2102	CACTCAGCGTAGCCTGAAGCCTGG
	2103	GAATTATCGACCGCAGCGGTGTCG
	2104	GTGACATCACATGGTGGCCGAGCG
	2105	AGCACCTTGCCGAGTCACCAGTGA
	2106	TAGGTTGCAGGAATGGTGGGCACC
	2107	GTCCCATACGTGTGGTACGCGGAT
	2108	TCGGATACTCTCGCGTGCCACGGG
	2109	CAACGTTCGCCCCTAAGCCCAAAT
	2110	GTTAGGTCACCGCGGCATATCCTA
	2111	GTTCACCGGCCTCTACTTGGGTTT
	2112	AATCCGCGTCTAGGTCATGTGGTC

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	2113	GCTACGCCTCTGGAGGTGGTACCC
	2114	CAGGGAATGCTACAAAGGGTCCAA
	2115	AAGGGTTAGCTGCCCGGTTAACAG
·	2116	CCTCGCAAGCGCGATATTTATGCC
5	2117	GCCTCCCGGTCATGGTCAAGGGAA
	2118	GCTGTTGAGCGGCGACCTGTGCAC
	2119	CGCTGACTTAGCTCTGATGTGCCG
	2120	TTCATGGCATTCATCACGAAGGAA
	2121	TAGTGTTATGCCCGCGTGTGAATG
10	2122	CATGTAAGGGCACGGTCGTGGGCA
	2123	CAGGAAGCTCGCTCCGTGATGCAC
	2124	CCTGCTGATAGCAACCTCACTGCA
·	2125	ACTACGAGGGCAGGGTCTAGGCG
	2126	CATAATGTGGGTGCTGACGCCGAT
15	2127	TAGCGAATCCACACAGAGCCGCTC
	2128	TCGCGAAATCCTAAATCCTGTGC
	2129	TGGCACGAATCAAGCCACCAACTC
	2130	GCGGACCGTCTTTGCTATCTGACG
	2131	AGGCCCCGCCTTGTAATTGGTCAT
20	2132	CTGGTCCCATACGCCGCTGACTAG
	2133	TGCTAACTGCGGCCCTACAGAGTC
	2134	TGGTTTTATGTTCGGTAGCGTCCG
	2135	AGCTCAAACTTCTCCCACGGGATG
	2136	CGCGAAGATAGTGAAATCCGCATC
25	2137	GAGTGAAACCTCTCGCGGGTTGCA
	2138	TCGAATGCTCTGCAGTGACGTCAA
	2139	AGGTGGCAATGATCGACGACCCTG
	2140	ACCTTAACACAGCCGACCAGGTGA
	2141	GTCCGGAGCCGTGCAAAGCAATAA
30	2142	TCTGCCTGACTGCTACATGCTCCC
•	2143	CTTTTGGGGATTAGAGGCCGACAA
	2144	GGCATAAAGGCTTCCGTTCCTGTC
	2145	GCGGACCGTAAAGCGGGCAGATAG
	2146	TTTCAAGAGTGCATCGAATCCACG
35	2147	CCGGCATCCCTTCTCGCTGTTGCC
	2148	ACACAGAGACGCGAACGGAGTGCA
	2149	AGCGGCATTCTCCCACTCGTTACT
	2150	GGAGCGTACTGCGCCTCGCAAGTC
	2151	AAACCCGAATGACACGGCAGATAA
40	2152	GGTCGGGTCCATATCCAAGTAGGG
	2153	AACCAGCGGATCGATAAAACGACA
	2154	GGTGTCCACCCGTTAACGCCGGTA

2155	AGCGCGACGTGGCTTGCCGTTAMA
2156	TCCCACGCTATAGGTCCAACGAC
2157	ATCAACGAACGATGCCGTTAGGTG
2158	GAGGCTAAGCCGTATGGCCGAGGC
2159	ACGGTCCGAAATGGTTAGAGGCAC
2160	ACGCAAACCATTCCTCGAGTAGGC
2161	TTACACGCTCGCTATTGGGCCATA
2162	CTCGGCACGGGTTTAGAACGCCGG
2163	ATTCGGTAAGGTATCGGGCTAGCG
2164	AGCACACCGTTATACATGACGGCG
2165	AGTCCCTGCCGTTCGCTCATGGAA
2166	GGGCTTATGACCAGTCAGGTTGGA
2167	GGTCACCACACGAGTGCCTGGTCT
2168	TTGATCGTGTCTCCCGAAACCCTC
2169	ATTGTCGCGATCGGCATTTCTTAA
2170	GGGTCCAACGACTTCTCGCTGCTG
2171	CAAATTCCTTGGGGGCCATAGTGG
2172	CCAGAGTATCCGCCGTTAGACGGT
2173	TCCTGCAGATCATCTCGTGTCTGG
2174	TGCGGGAGATTTGAACAAGCTGTA
2175	TTAGACGCCGAGCTAGGCAACGTC
2176	TTTCGGCAGAATCTCCGATTCAAC
2177	TGGCGAGCAGACCTACAAGACAGA
2178	GGCGACAGACCGGTACATCGGCCA
2179	TCTAGACCTGCGTTTCGTGGGACC
2180	GCCGAGCGTGGTACCATACGTTCA
2181	TAATCACACCGCTTTCTGTGGCT
2182	GGCCGGAGCCATTGGACACTTCTT
2183	CCTGTAGACCTGCATGGATCGCTG
2184	GTGTGTGTCTGCGTTGGGGCAC
2185	ATCGCCGTTCCCGCAAAATAAGCA
2186	TGGATCAACGGGGTAGTGAAAACG
2187	AAGCGACGATGCTTTCTTGAGCTG
2188	CACGGGCACGTGTTCTACGCTTGC
2189	ACGGGCTGGGACAAGAGCTAGAAA
2190	GGTAACTGGCTCCGCTCTCACATC
2191	ACTCTGGCTGTTGGCGAACGTGAC
2192	GACCGAGGACCAGTCCTTGCTCTC
2193	AGTAGCTCTTGCGGCCTAACGGCA
2194	TTCTTGTCCTGGGGGAGAGCAGTG
2195	TTAGCAGGGAGGTTGTCGGCTCAT
2196	TCGGGAGAGGGCCTTACCAAAAGC

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	2197	AGAACGTGGATTGTACGCTCCGCC
	2198	CTTCACAGCCTGGAGCCACCAATG
	2199	GAGATCGATGAAACGCACCAGCGG
	2200	GGGTCCAGAGTTGGTGTGGGATAA
	2201	CCGTCCACCCCAGATAGGAATCAC
	2202	TGCCTCGCTTCTGTGAATCTACGA
	2203	GATCACAGCGTCCGCGCATAACGG
	2204	ATGACGCCTTACATGACGCACCTT
	2205	GCGTGGAATAACGCCCTTAGTTCA
	2206	GGTCTACCATTTCTCGCCCGACCG
	2207	ACACCTCTCTGGCGTAGACGCTCA
	2208	GTAGAGGTGCTCAGGACTCGTCGC
	2209	GTAAGCAGGAGGCGAAGGCGCGAA
	2210	TCTAAGGGCCGTTTCAATCGACCT
	2211	AACCTGATTTCAGGGTCAGCCCGA
	2212	GTCACGCGATTGGCCCACCTATTA
·	2213	ACGATGCCGCGCATGTAACCTAGT
	2214	TGAGAGATGTCTCGTCAACGCCTG
	2215	GCATATCTCGCGGTGACAGACGAA
	2216	TATCCTGGACCCAGCCTTGGAGGA
	2217	GACCCAACGTCGAAATTGTGCGAT
	2218	TGAAAATCGGGGCATCTAGTTTGG
	2219	CCGCGAAAAGGATTTGTGTACGCA
	2220	CATTCCATTTATCCGCAGTTCGCT
	2221	CCTGTCTGTCGAGCCAGCGTCTAT
	2222	TCAGCGCGGCTAAACAAGTTATGC
	2223	ACGCCTACGAACGACCCAAGAGAG
	2224	TGCGCATCTACCATTGTGTGGATC
	2225	AAGTCCGCGCTCGCTCTGTAATA
	2226	GCTGGGTCATTGCTCGAGTAACCA
	2227	TGGAGCGTTCTGGCAATGACCGAC
	2228	CAAGTCAATTCTTGGCCAATTCGG
	2229	CGTTCATGCAAGGATCCCAGGTTA
	2230	ATGCCAATAGAAGCTGGGGATGCT
	2231	CCTAACTCTCCCTTGAGGCCGTTC
	2232	ATCTCGGCGAAGGTTCCAAACATT
	2233	GCGACAGATTACGCTGCGGTTTTC
Γ	2234	AAGCCCAGACGCCAACACGTTAC
	2235	TCAAGTTCAAATCACATCCCGTGG
Γ	2236	GATTGTCGTTCTGTGAGGCG
	2237	ACCGAACTATGTTCCGGCATGGCA
	2238	CGTCATCGGGTGTGCAATGCCGTT

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	2239	CGGACGGAGTCACGTTTGTGCACT
	2240	TAAACAAGTCGTGTGCCTTTGCCG
	2241	TAATTACTGGCCTGTGGAGCAGGC
	2242	GGAGCGGCCGAATGGTGCTCTTA
5	2243	ACTAAGCAAGGCTTGGATGTGCGT
	2244	GGCAGCTCAGCGGCAGTACGCTAC
	2245	GCGAGGCGAATTATCCGCGGATTT
	2246	CATACGACACCTTGGGGTGCTA
•	2247	TGCTTGGGCTTTAAACCCCGTTTT
10	2248	CCGGTTGGAAAACGCAAATATCGG
	2249	AAACTAGCTAGCCGCACCCGCAAG
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	2252	CTTTCATAAAGCCAACCGATGCCC
15	2253	CTGACTGCATCTCGAAAGCGGGTG
,-	2254	ATTTCTTCGGAGAATCGGCCACGT
	2255	CATTTCGGGCCCTAGCTACTGCGC
	2256	CCGATCCCGCACATCCGTATCCTG
	2257	TATCACCGGGAGCGTCTTATCGTG
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	2259	GCGTGGCACTCGCTTGTCTAGGTA
	2260	CTCAACGAACTCAAGGGCCGCTAC
	2261	AGCCTGGTATCGACCAATCCTGCA
	2262	TACGCGTTCTAGTTGGCCGGATCC
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	2264	GGGACCCCTAGCAACGTCACCTTA
	2265	CTGCCTCCCAGGAGTCATTGGAT
	2266	AACCCGCAAGACCAGTACCAATC
	2267	GGTCACATACGCGCTAAAAAGCGC
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	2269	AACGCGGCACGCTTAAAGGTGCAT
	2270	GATCGCACGCCGATTAACCTTACA
	2271	CCTCCTGATTGGGAGTGCGGAATT
	2272	CGGAGGGTAATAGGCTCCTCTGCG
35	2273	ACAAGAACTGGACATTACCGCGGG
	2274	TGTCGTCTTAAAGGCCTTTGTGCG
	2275	GGTGACCATGTGGCGTTTTAGCTT
•	2276	CACGGTTGCGCACGGTACCAGAAC
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	2283	CGACGGACTTAGTAGCAGGGCCT
	2284	CCGATTCGCGAAACGACCAAGTAG
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	2286	GTGCAGTAGACGACTACCGGCGTC
	2287	TTCGCCCATCGTATCAAGCAATTC
	2288	GAATCGCGACTACCCGTCGGGTCA
	2289	CCAGCACTCGCCATCGGTTATAAT
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	2293	TGGCCTGTCGTGTCGAAGGAAACA
	2294	GCCTCACCGATAGCGAGCGTTTGC
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	2296	CCGCAGACGAGTTTCTTGTGACAG
ı	2297	GTTCGCAATCGCGTGCTAGGAAGC
	2298	TGTTGTACACATGCATCCGGTGAA
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	2303	GTCGTTTGTCTGGGCATTAACGGC
	2304	CAGGCTCTCGTTCGGTACAAACGT
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	2308	CGGGAGATGAGAACGGTTTTGTGC
	2309	TAGATCGCGACTGTACTCAGGCCG
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	2311	CGAGGAGCTCCACATAAGCCCAAT
ı	2312	TGGCTAGGGATGGGGAATCATCTT
	2313	AGGATTGGGTGCCTGGATGCATTG
	2314	TGTATCTACCGGCCTGAAGCAGGT
35	2315	TCCCTACGCGCATGACTCGCTTAC
	2316	TGGTCGATCACCTGTGACAGACGC
	2317	TGGGGGTAGTCCATGCATCAATTG
	2318	CCCTGCCAGGATTACTATTCCGGA
	2319	TCCCGCACGGGGAATTTAAGTAGA
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	2322	TTCGGCGCTAGTGGACGCCGTCAA

2323	GAGCTTCATCTCATCAGTTCCGCG
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2325	GGCCAAGGATGGACCTTACGATGG
2326	GGTTCCGGAATTTGTCACCGCTTC
2327	GCGCTGGATAGTCTGCGAGAAGCC
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5	2369	CGATTCCCATCATAATGTGGGTCC
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	2372	GGTGGACCATGCGCTGTGGTATGA
	2373	TATTTGTCGAAGATCGCAAGCGCC
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	2376	TGCTTGCTATCCGAAAAAAGCAGG
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	2381	TCGGTCTAATGTCCACGCAGACAC
	2382	ATGTGTTTGCCACGCGCTCCTATT
	2383_	TGGCGAGGCACGGCTCTAATTCGG
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	2385	CTCAGAGAGTCTATCCGGCGCCCT
	2386	GGAACATCTCCTGGGTCCCTCAGA
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,	2388	TGACTTGGGCGGACAAAGAAACGC
25	2389	AGATCATCGGGACGCTTCATGCTA
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}	2395	AAAGGAACTTGGCCAACCCTATGG
.	2396	TGTTTTCGCACTCCACCTAATCGC
	2397	CAATGGGTTTCATAAGGGCAGGCA
	2398	GCCTAACACACAAGGGTCCCTCTG
35	2399	CGTCATGCGGTCCGAGGATCGATC
	2400	CCACACGGGCACGGAGTAATATCT
•	2401	CATCAGACATAGGTCGCGTGCCGA
	2402 · ·	AGATGAAACCAAGGGAGGACGCAG
	2403	GGCTACCCATAGGCTCAGCAGCAC
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	2405	TGTGTTACGGCGAATGCAACAGTC
	2406	CGATAACAGGTCGCGCCGTTACTA

	2407	TGATAAAGTGAGGCTCCAGCGCGA
	2408	AATTGTGCACGGATCTGCACGGCG
	2409	GCCGATACTGAGCATTTCACTGCC
	2410	GCAATGTACTGTCACCAGTGGCGA
5	2411	GGCATATCGGTAACACTTGGTCGG
	2412	GGGTCTCAAACCAGCGTGGCCGCT
	2413	GTCTCCGGGACCATTGAGCTGGAG
	2414	GGCCTTCGGCATTCAGACGGGTTG
	2415	CGTGATAGGCCACAGCGCTCAATT
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	2417	CGGGTATGGTTGATAACAGCGTGG
	2418	ACGACGTCCTTGGGACCGTATTGT
	2419	CTGATATCGAGCCTGAGCCTTTCG
	2420	TCCCATTGGCCTGTATGCTGGCCT
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	2422	CGAAAGCCAGTAGCCGATTGCGTG
	2423	GGTTCGGCTTATTCCACTGCGACA
	2424	AGCGAGGGCTAACTTTTTAACGCG
	2425	CGGCGCTGATGACGGGACTCGATT
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	2427	CCCATTACGAGCACACCATGGC
	2428	GGCCGCTAATCTTTACGCATCACG
	2429	ACGCCTTCCTAGTGTCCAGCCCTT
	2430	CTGTCAGGTCCTACCCAATGGCTC
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	2432	ACAAACGATACACGCAACGCTGTG
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	2435	ATCTCGAGAACAGCGTGCGTGCGG
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	2439	TGACCTGAAGCCCATCCATAAGCA
	2440	TGGTATTCATTCCGGATAAGCGGG
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	2442	ACCGCTTTCTGTGTAGAGCCCTGA
	2443	CAAATAGACAATCGCAGCTTCGGG
	2444	TGTCCTGACAAATCAAGGTGCAGG .
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	2447	TGTTCCGACAGGGCACTGCTAGAC
	2448	TCGCTGGCTTGGGAAGGCCTTCGT

	2449	GTGCACCTCCGTTGGCGTAGAATG
	2450	CTCATTTGGGACCGATCGGGTTGC
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	2452	TTGCCCGGCAGGTTCTGTGTAATG
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	2455	AGGGCGTCTCGGTTGAACCTCGGT
	2456	TGACCGTTCAAAGAGCAAGCCAAC
	2457	ACACTCACCTGCTGTCCCTGCTGA
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	2460	AATCGAATTTCCCAGCGGCTGTTT
	2461	AAGCAGGTGGGATCCTGGGGATCA
	2462	AATCCCAGACTCGCTCTTCGTGCT
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	2464	TACGAGAGCGGGCTTAGACGTCGC
	2465	GCGATTTTGACCCACGGTTATCGA
	2466	AGCTGTATAATTTGGATGGCGCGA
	2467	TCCGCGAGTCTTAGCCGATTGAAC
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	2469	TGTTATTGGCAGTTCGAGCGACAG
	2470	GCGAGCCTTTTTGCTTGGGAAGAG
	2471	AGAAGAAAGGTCAGCGTCGACGA
	2472	CGGGTCGACCCTTGAAGCATAACC
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	2474	GCAGTCCTATCCGGAGCCTGACAA
	2475	AAGGTGCGCTATTTGTTGTCGGTC
	2476	AGTGGAATCCATGCCGACACCTGA
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	2480	GGACACCGCCAACCTCATAGTTGC
	2481	AATGGTGTTCGCCTGGACTACCAC
	2482	TAGGAAAGCGTACACGGGAATCCG
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	2484	CGTGTCCGTGTGACACTGTCCATG
	2485	TCCAGGCTGTTGCGGATACGGTAG
	2486	GTAGGCAAAATGGTCGCGATCAAT
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	2490	TTCGATAGGAATACCAGGGCCTGG

	2491	GGCCATTTGAGGAGGATTATGCAA
j	2492	ACCTTCTGACCTGGACTTTTGGCG
	2493	GACCAATCCGCAGTTGAGCAACAG
	2494	TCGGCCACTCACCATGAGTGTAGG
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	2496	TAACGCAAAGGCGCGATCCTCGCT
	2497	TGGGTGGGCCAAATATTACTGCAA
	2498	GTCCTCGAAAGGGGCATCCAAACA
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	2501	TGTGTTGCCAACCCTAGGTCATCA
	2502	CTGATGCTGTTCTCGTCGGTTGAC
	2503	AAGCTGCAAAAGGTGAGCGTGGCA
•	2504	TCTGACGCGTGCTTGGGAGTCTAT
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	2507	CGCAGCGTATCCCATGTTGCTTGA
	2508	GAGATGGAATTGTTCGCCCAAAGA
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	2511	AGGGCTAATTTACATCGCCTTGCC
	2512	AAGTGCACATCCTCACGAAGCGAT
	2513	TCAGGCAGCCGTAATTAAATGCGC
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· ·	2517	TAGAATTCGCCTCTTCTAGCCGCC
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	2522	AGTTAGGCTCTCGGTGCGGTCCAT
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	2526	GCGTGTCCATTCGCTTGAGGTTTC
	2527	ATCCTGAACGGCGATGACCACCAC
	2528	TTACGTTTCTCACCGATCAACGCC
	2529	GCCGTCTTGAGTGGCTAAAAGGCA
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	2531	AACCAAGACTCGTCCCAAACGAA
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	2535	AGGCGCTTAGAACCGTGAAGGCAG
	2536	TGGAAAATTTTGGGAAACGCTGGA
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	2538	TAGACGGCTGGCGAATCTTACGGT
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	2540	GTAGCCGAGAGCAATTTTCACCGC
	2541	GCAAACTCCCCTGCCCTTTAGCCT
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	2568	ACGCGTAAATCAACGACGTGGTCG
	2569	CGTAGGTGGTAAATGTTGGCCCAG
	2570	GTTGGGATGCTGCTTCACTTTGGG
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	2577	AATTTTCCCCGATTTGAAGAAGCG
	2578	TCGCATACTTCGTCGGCGAGTATT
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	2580	GCAGAATCGAATTGGGGTGGGTTT
	2581	CTCTCGGTTTCTCAACCGAGCTCG
	2582	GACCAGTTAGTGCAATGGTTGGCG
	2583	TTCTCGCACAGCTAGTCAGCCGAT
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	2590	CATAAAGCACGGACGCGACTTGAT
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	2592	GGGTCATCGTGCAGTTATGCCGTA
	2593	CCCGGATAATCCTTTGTCCAGCCG
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	2595	CCTGCTGGTTCGGTCGTAAGCGAA
	2596	GAGGCACCAATCGGTCTGAAAATG
	2597	TACGAAAATGGTTGCGCCGGGTCT
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	2600	CCGAATCAGCCGTATTTGCTGGAA
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	2605	GCCACATTCTGCTACCTCCGTGTT
	2606	TCCTGTGCTTTGTGACGTGCTAGG
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	2608	GTAGGCCCGTCGTTAACCATCTCA
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	2613	AAGTCCTGAGGCCGTTCGGTTTCT
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	261.7	CACTCCGTCTCGTCCATTAATGCG
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	2619	GAATCAATTTTCCAGGGACGGGAC
	2620	GAGAGCATACGCAATGTTCCCTCC
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	2622	GCCTCTCCTATGACGATGACCCAC
	2623	TGGGCGCGCTTTTAAGACTACATC
	2624	CGTTGGGTACCGTTCTATCAACCG
	2625	GCAGTGAGCTGGGTTCAATGCTTC
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,	2627	AGACAAAGGTCCCCATTGCGAAAT
	2628	ATACTCGTCGACGAGAGCGGAAA
·	2629	GCAGAATGTGTTGTCTTCGCAGCC
	2630	CACCATGCCTTCATCTTGGCCTAG
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	2632	GCGACCTGCGGCGTGTGTATTCTC
•	2633	TCGGTGTATGCACCCTTTCTCCAT
	2634	ACCGTCGAATCTTGCGGCCAATGT
	2635	TAATGCATGCTCCCGGCTCACGTT
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	2637	CATGGGGTTGTCAGACGACACCTA
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	2639	TCGAAACCGCGGGAAAGGGTAAAA
	2640	CGCTAGGGCCTAGGGGCACAGACA
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	2643	TCCCAATGGCCTGTCAAGCATAAA
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	2648	TGAGGACCATCCAATGGATCGGTT
	2649	TCGGTGATTGGTAATTTGGATCCG
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	2652	CGGTACAGCGATAGCCAAGGATA
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,	2708	GAGGCGGTCGAGGCTCACAATATT
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	2714	AGAAGCGCGAAGTGTACCCCGCAT
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	2717	TCAACCTGAGTCCTGATCCCAAGC
	2718	TGCTTACCGTTCAGGGAGGCGTGT
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	2722	GCGTAGTGCGAACGCCCGACCTA
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	2724	CGACGTTCAAAGCGGGAGAGGAGG
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	2726	CTATTTCGTGCCGCGTCGGACAAG
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	2728	ATCACTCGTGCGTACCCGACCGTC
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	2755	CGCAGCATCCGAGTTAACACACAT
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	2839	TGTAATCTGAACAAGCGGACCCCT
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	2902	TATACAGCATCGTCGCCGGGCATA
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	2904	TGCACTCCGCAACCTTGTGAAATC
	2905	AACCCGTCATGCCGACTCCATCTA
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	2913	ATATGTTGATTCCCGTGCTGCACA
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3750	CCCGGCGGTAGAAATTGACAACCT

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3752 CTTCTCTCTTGTGCGGGCTCCCGT 3753 TTGAAGGGACTGCCAAATGGCA 3754 ACGCATGACGACGTCCCAATGGCA 3755 AAATGGATGTTACGCCGGCAAGCT 3756 TCGTGCGAGGCCTCTTCGGCATAC 3757 TACATCGCGTCGAGTCATTCTTGG 3758 TCACACCACATAGTGACACACGT 3759 CAGGTTCACGGTTGAGGAGTCCGA 3759 CAGGTTCACGGTTGAGGAGTCCGA 3760 GGTGTTACACCGCTTCGTTGTCCT 3761 ACAATAATAAGGGACCACGT 3762 TCGGGTCCATGATCACCACA 3763 ACCATTCCTCGTGGCGCG 3764 TCGCAGGTGAACCGACTCAA 3765 TCCTTGCTCTCGGGGGATCAA 3766 TCCGAGTTAAACGGACGCCGA 3766 TTCCGTGTAGAACGGACGCACA 3766 TTCCGTGTAGAACGGACGCACA 3767 ACTCTAAGTAGGCCCGCA 3768 TTGGTGCTGAAAGGTGCTGGC 3769 CCGAATTACCCATTCATACGCCAC 3770 GATGGAAGAGAAAGTTCGCC 3771 ATGACGGAAAGATTCGCC 3772 ACGGTTCGGTTCTTTAGTCCAC 3773 GGATCCCGTAATTGAGCCGCCCC 3774 ACCCGTTAAGTCGACCGCCGCA 3774 ACCCGTTAAGTGACCGCCGCCAC 3776 TCGATGTAACGGTGCCACC 3776 TCGATGGAACGATTGAGCCACC 3776 TCGATGGAACGATTGAGCCACC 3776 TCGATGGAACGATTGAGCCACC 3776 TCGATGGAACGATTGAGCCACC 3777 AGCAACGAGTTTATGAGCCACCC 3778 TCGATGGAACGATTGCGCCAACC 3778 TGGAACGAATGGATGCCAACC 3779 TCTCTTGTTTAGCCCACCACTACAGCAA 3778 TGGGAAACGAATGGGTGGCGATC 3780 CCTGCATTAGACGGTCCCGCGGT 3781 GAACGAAGTTTATGAGCCACCAAC 3782 GGCGCCGAACCACATTATAGACACAA 3783 AGCATCACGACTACAGCAA 3784 TTTCAAAAACATCGGCCACCATTCGG 3785 CCCAGGCGCTCACACCAATTCAGCAA 3786 TTCGCAGCACGTGCCTTCGG 3787 CCGTTTTGCTTCACTCCGCGGAACCAATTGAGA 3788 AGCACACGCACTGACACAATTGAGA 3788 AGCACACACCAATTGAGA 3788 CCCAGGCGCTCACACCAATTGAGA 3788 AGCACACACCAATTGAGA 3788 AGCACACACCAATTGAGA 3788 AGCACCACGCACTGAGCAA 3788 AGCACCACGCACCACACACTATGAGA 3788 AGCACCACGCACCTGAGAATTCGT 3787 CCGTTTTGCCCCACCTAGACCAA 3788 ATTTGTCCCCACCTAGACCAA 3789 TAAGCACAAAGCCCCAACTCCGGT 3789 TAAGCACAAAGCCCCAACTCCGGT 3781 AAACCACAAAGCCCCCACCTACACCCAACCCAATTCCGCCGGT 3781 AAACCACAAAGCCCCCAACCCCGGT 3781 AAACCACAAAGCCCCCAACTCCGGT 3781 AAACCACAAAGCCCCCAACCCCGAACCCCGAAACCCAATTCCGGCCGG		3751	AAGGGATACTCAGGCGCCTGTTTT	
3754 ACGCATGACGACGTCCAGTACGGG		3752	CTTCTCTTGTGCGGGCTCCCGT	
3755 AAATGGATGTTACGCCGGCAAGCT 3756 TCGTGCGAGGCCTCTTCGGCATAC 3757 TACATCGCGTCGAGTCATTCTTGG 3758 TCACACCACATAATGGCACCACGT 3759 CAGGTTCACGGTTGAGGAGTGCGA 3759 CAGGTTCACGGTTGAGGAGTGCGA 3760 GGTGTTACACGGTTGAGGAGTGCCG 3761 ACAATAATAAGGAGAGCATCGGCCG 3762 TCGGGTCCTATGATCCAGTCCAA 3763 ACCCATTCCTCCTGCGGCGATCAA 3764 TCGCAGGTGTAGACGGACCACCAA 3765 CTCTTGCGTAGTAATCAGGCCGCA 3766 TTCGGTGTCACGCGAGCCTGCTTT 3767 ACTCTAAGTAGGCGGGCGGACTAA 3768 TTGGTGGCTGAGAGGCTGCCGA 3768 TTGGTGGCTGAAAGGTGCTTGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTTCCCGCAA 3771 ATGACGGAAAGAATGTATTCGGC 3772 ACGGTTCGGCTTTCTGTTAGTACG 3773 ACGGTCGGTTAATTGAGCGCACC 3774 ACCCGTTAAGTGAGCGCCACC 3774 ACCCGTTAAGTGAGCGCCACC 3776 TCGATCGGAACGATTGAGCGCCACC 3776 TCGATCGGAACGATTGAGCGCAACC 3776 TCGATCGGAACGATTGAGCGCAACC 3776 TCGATCGGAACGATTAGAGCGCAGAA 3778 TGGGAAACGAATGGTTGGCCAACC 3778 TGGAAACGAATGGTTGGCCAACC 3781 GAACGAGGTTCACCGCATGT 3781 GAACGAGTTCAGCACACAA 3782 GGCCCGAAGCAGAACGACCATAT 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGCATCACGATCAGGAA 3784 TTTACAAAAACCATCGGCCTGGGA 3785 CCTGCAGCACCACAATTGAGA 3786 CTGCAGCACGTACCAATTGAGA 3787 CCGTTTTGTCCCCACCTAAATTGAG 3786 CTGCAGCACGTACCAATTTGAGAACCAATTGAGAA 3786 CTGCAGCACGTCCAGCATAATTAGAGCGTTAGAATTCGT 3787 CCGTTTTGTCCCCACCTAAATTGAGA 3788 ATTTGTCCCCACCTAAATTGAGAACCATTTGGT 3787 CCGTTTTGTCCCCACCTAAATTTCGT 3787 CCGTTTTGTCCCCACCTAAATTCGT 3787 CCGTTTTGTCCCCACCTAAATTTCGT 3787 CCGTTTTGTCCCCACCTAAATTTCGT 3788 ATTTGTCCCACCTTAGAGCT 3788 ATTTGTCCCCACCTTAAATTCCT 3789 TAAGCAGAAAGCCCCAATTCCGGT 3789 TAAGCAGAAAGCCCCAATTCCGGT 3789 TAAGCAGAAAGCCCCAATTCCGGT 3789 TAAGCAGAAAGCCCCAACTCCCGGT 3789 TAAGCAGAAAGCCCCAACTCCCGGT 3789 TAAGCAGAAAGCCCCAACTCCCGGT 3789 TAAGCAGAAAGCCCCAACTCCCGGT 3789 TAAGCAGAAAGCCCCAACCCCGGT 3789 TAAGCAGAAAGCCCCAACTCCCGGT 3789 TAAGCAGAAAGCCCCAACCCCGACCCCCGACCCCCCCCCC	Ī	3753	TTGAAGGGACCTGCCAAATGGCGA	
3756 TCGTGCGAGGCCTCTTCGGCATAC 3757 TACATCGCGTCGAGTCATTCTTGG 3758 TCACACCACATAATGGCACCACGT 3759 CAGGTTCACGGTTGAGGAGTCGGA 3759 CAGGTTCACGGTTGAGGAGTCGCA 3760 GGTGTTACACCGCTTCGTTGTCCT 3761 ACAATAATAAGGAGAGCATCGCCG 3762 TCGGGTCCTATGATCCACTCCCAA 3763 ACCCATTCCTCCTCGCGCGATCAA 3764 TCGCAGGTGTAGACCGACCACAA 3765 CTCTTGCGTAGTAATCCACCCCCAA 3766 TTCCGTTGCAGCAGCCTGCTTT 3767 ACTCTAAGTAGGCGTGGGTGCGCA 3768 TTGGTGGCTGTAAAGGTGGTTGGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCCCAA 3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTTAAGTACACG 3773 GGATCCCGTAATGAGGCGCCAC 3774 ACCCGTTAAGTCGACCCTCCGCAA 3775 TTCGATCGGCTTCTTAGTACCG 3776 TCGATCGGAGCTGCCTGCGG 3776 TCGATCGGAGCGTGCCACC 3777 AGCAACGAGTTTATGAGCGCACC 3778 TCGATCGGAACGATTATGAGCGCACC 3778 TCGATCGGAACGATTATGAGCGCACC 3778 TCGATCGGAACCATTCATCCGCCATGT 3779 TCTGTTTTGCCCCCACCACCACCAACAA 3778 TGGGAAACGAATGGTGGCGCACC 3781 GAACGAGGTTCACCGCCATGT 3782 GGCCCCACCTACCAGCAA 3783 AGCATCACGATCAGGAACCACTATTGAGACGCTTCCGGAA 3784 TTTTACAAAACCATCGGCCTTCCGGAA 3785 CCTGCATTGGATGTCACCCCCTGGGA 3786 CTGCAGCACCACTATTAGAACCACCATTTAGAA 3788 CTGCAAGCACCACTATTAGAACCACTATTAGAACCACCACTATTAGAACCACCATTTAGAACCACTATTAGAACCACCATTTAGAACCACCACTATTAGAACCACCATTTAGAACCACCACTATTAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACAATTATAGAACCACAATTATAGAACCACAATTATAGAACCACCAATTATAGAACCACCAATTATAGAACCACCAATTCCGGT 3788 TAAGCAGAAAAGCCCCAACTCCCGGT 3789 TAAGCAGAAAAGCCCCAACTCCCGGT 3789 TAAGCAGAAAACCCCAATTCAGACCACCAATTCCCCCCGGT 3789 TAAGCAGAAAAGCCCCAACCCCACCCACCCACCCACCCAC		3754	ACGCATGACGACGTCCAGTACGGG	
3757 TACATCGCGTCGAGTCATTCTTGG 3758 TCACACCACATAATGGCACCACGT 3759 CAGGTTCACCGGTTGAGGAGTGCGA 3760 GGTGTTACACCGCTTCGTTGTCCT 3761 ACAATAATAAGGGAGCACCGCG 3762 TCGGGTCCATATACCAGGCCGCG 3763 ACCCATTCCTCCTGCGGCGATCAA 3763 ACCCATTCCTCTCTGCGGCGATCAA 3764 TCGCAGGTGTAGACGGACCAAAAG 5 TCGCAGGTGTAGACGGACCAAAAG 5 TCCGTTCACGCGAGCCTGCTTT 3767 ACTCTAAGTAGGGCTGGGTCGCA 3768 TTGGTGGCTGTAAAGGTGCTTGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATACCCATTCATACGGCAC 3771 ATGACGGAAAGAATGTGGTTCCCGCAA 3771 ATGACGGAAAGAATGTGGTTCCCGCAA 3772 ACGGTTCGGCTTCGTTAGTCACG 3773 GGATCCCGTAATTGAGCGCACC 3774 ACCCGTTAAGTCGACGCCTGCGG 3776 TCGATCGGACGCTGCGGG 3777 ACCACACGAGTTCACCGCCACC 3777 ACCACACGAGTTCACCGCCACTGT 3777 ACCACACGAGTTCACCGCCACTGT 3778 TGGGAAACGAGTTGAGCCCAACC 3778 TGGGAAACGAATTGCCCCACCTACAGCAA 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGATGACCCAGCAA 3781 GAACGAGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGACCACTATT 3783 AGGCATCACGCATCAGGCAC 3785 CCCAGGGGGTCACCAATTCTAGA 3786 CTGCAGCACGACCAATTCTAGA 3787 CCGTTTTGCTCCAGCTAAATTCGT 3788 ATTTGTGCCCCACTTAGAGCC 3788 ATTTGTGCCCCACTTAGAGCT 3789 TAAGCAGAAGCCGCAACCCATTCCGCGGT 3789 TAAGCAGAAGCCCCACCTACAGCAT 3789 TAAGCAGAAAGCCCCACCCCGGT 3789 TAAGCAGAAAGCCCCACCCCCGGT 3789 TAAGCAGAAAGCCCCCACCCCCCCCCCCCCCCCCCCCCC	5	3755	AAATGGATGTTACGCCGGCAAGCT	
3758 TCACACCACATAATGGCACCACGT 3759 CAGGTTCACGGTTGAGGAGTGCGA 3760 GGTGTTACACCGCTTCGTTGTCT 3761 ACAATAATAAGGGAGCATCGGCCG 3762 TCGGGTCCTATGACCAA 3763 ACCCATTCCTCCTGGGCGATCAA 3764 TCGCAGGTGTAGACCGACCAAA 3765 CTCTTGCGTAGTAATCAGGCCGCA 3765 CTCTTGCGTAGTAATCAGGCCGCAA 3766 TTCCGTGTACTAATCGGCCCGCA 3766 TTCCGTGTACAGCGACCAAAAG 3767 ACTCTAAGTAGGGCTGGGTCGCGA 3768 TTGGTGGCTGTAAAGGTGCTTGGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTCCCGCAA 3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATGAGGCGCCAC 3774 ACCCGTTAAGTCGACCCCTGCGGG 3776 TCGATCGGAGTCTACCGCCATGT 3777 AGCAACGAGTTAGACGCCAGGA 3778 TGGGAAACGAATGGTCGCCAACC 3778 TGGAACGAATTGATCAGCCAAGA 3778 TCGATCGGAGTTACCGCCATGT 3779 TCTGTGTTGCCCCACCTACAGCAA 3778 TGGAACGAATGGTGCGGTTG 3760 CCTGCATTGGATCACCGCGGTT 3761 GAACGAAGGATCACCGCAGTAT 3762 GGCCCGAAGCAGAACGACCATAT 3763 GAACGAAGGATCACGGAACCATAT 3763 AGGCATCACGCATCAGGTACTTCC 3762 GCGCCGAAGCAACCAATTGAAGA 3778 TCTGATTGGATCACCGCCGGGT 3763 AGGCATCACGATCAGGTACTTCC 3763 AGGCATCACGATCACGTACTTCG 3764 TTTACAAAACAATTGGCCCTGGGA 3765 CCCAGGCGTCAACCAATTGAAGA 3766 CTGCAGCAACCAATTGAAGA 3766 CTGCAGCAACGAACCAATTGAAGA 3767 CCGTTTTCCTCCAGCTAATTCGT 3763 ATTTGTCCCCACCTTGAGCGT 3766 CTGCAGCAGCTGCCTGGAATTCCT 3767 CCGTTTTCCTCCAGCTAATTCCT 3768 ATTTGTCCCCACCTTGAGCGT 3768 ATTTGTCCCCACCTTACAGCGT 3768 ATTTGTCCCCACCTATGAGCGT 3768 ATTTGTCCCCACCTATGAGCGT 3769 TAAGCAGAAAGCCGCAACTCCGGT 3769 TAAGCAGAAAGCCCAACTCCGGT 3769 TAAGCAGAAAGCCGCAACTCCCGT 3769 TAAGCAGAAAGCCGCAACTC	Ī	3756	TCGTGCGAGGCCTCTTCGGCATAC	
3759 CAGGTTCACGGTTGAGGAGTGCGA		3757	TACATCGCGTCGAGTCATTCTTGG	
0 3760 GGTGTTACACCGCTTCGTTGTCCT 3761 ACAATAATAAAGGGAGCATCGGCCG 3762 TCGGGTCCTATGATCCAGTCCCAA 3763 ACCCATTCCTCCTGCGGCGATCAA 3764 TCGCAGGTGTAGACGACGAAAAG 5 3765 CTCTTGCGTAGACGACCGACCTGCTTT 3766 TTCCGTGTCACGCGAGCCTGCTTT 3767 ACTCTAAGTAGGGCTGGGCAC 3768 TTGGTGCTGTAAAGGTGCTTGGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTTCCCCCAA 3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGCGCCTGCGG 3774 ACCCGTTAAGTCGACCCTGCGGG 3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGAA 3778 TGGGAAACGAATGGGTGCCGGTTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGACCCACTACTACTC 3781 GAACGAGGTCCAGGTACTACTC 3782 GGCGCCGAAGCAACCAATTT 3783 AGGCATCAAGGAACGACCATAT <td< td=""><td>Ţ</td><td>3758</td><td>TCACACCACATAATGGCACCACGT</td></td<>	Ţ	3758	TCACACCACATAATGGCACCACGT	
3761 ACAATAATAAGGGAGCATCGGCCG 3762 TCGGGTCCTATGATCCAGTCCCAA 3763 ACCCATTCCTCCTGCGGCGATCAA 3764 TCGCAGGTGTAGACGGACGAAAAG 3765 CTCTTGCGTAGTAATCGGCCCGCA 3766 TTCCGTGTCAGCGAGCCTGCTTT 3767 ACTCTAAGTAGGGCTGGGTCGCGA 3768 TTGGTGGCTGTAAAGGTGCTTGGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTTCCCGCAA 3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGCGCAC 3774 ACCCGTTAAGTCGACGCCTCCGGG 3775 TTCGATCGGACGCCTCCGGG 3776 TCGATCGGGAGTTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGA 3778 TGGGAAACGAATGGGTGCCGAGA 3778 TCGGTTGGCTTCCCCCACCTACACA 3780 CCTGCATTGGATGACCCCTCAGCAA 3781 GAACGAGTTTATCACCCGCGGT 3782 GGCCCGAAGCAGAACGACCATAT 3783 AGCATCACCGATATCAGCA 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGAGA 3786 CTGCAGCACTCACAATTCAGA 3787 CCGTTTTGCTCCAGCTATGAGCCT 3788 ATTTGTGCCCACTTAGAGCGT 3788 ATTTGTCCCAGCTATGAGCGT 3789 TAAGCAGAAAGCCGCATCTCGGT 3789 TAAGCAGAAAGCCGCACCTCAGACA 40 3790 GCGACTGATATAGTGCCCGGCT	[3759	CAGGTTCACGGTTGAGGAGTGCGA	
3762 TCGGGTCCTATGATCCAGTCCCAA 3763 ACCCATTCCTCCTGGGCGATCAA 3764 TCGCAGGTGTAGACGGACGAAAAG 3764 TCGCAGGTGTAGACGGACGAAAAG 3765 CTCTTGCGTAGTAATCGGCCCGCA 3766 TTCCGTGTCACGCGAGCCTGCTTT 3767 ACTCTAAGTAGGGCTGGGTCGCGA 3768 TTGGTGGCTGTAAAGGTGCTTGGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTTCCCGCAA 3771 ATGACGGAAGAATGTGATTCGGC 3772 ACGGTTCGGTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGGCGCCAC 3774 ACCCGTAATTGAGGCGCCACC 3774 ACCCGTAATTGAGGCGCCACC 3776 TCGATCGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGGTTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGACCGCCGGGT 3781 GAACGAGGTCCGGCGTTGCATCTC 3782 GGCGCCGAACACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCAGTACCACTATGAGAC 3787 CCGTTTTGCTCCAGCTAGAGCAT 3787 CCGTTTTGCTCCAGCTAGAGCAT 3787 CCGTTTTGCTCCAGCTAGAGCAT 3788 ATTTGTGCCGCATTGAGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3789 TAAGCAGAAAGCCCCAACTCCGGT 3789 TAAGCAGAAAGCCCCAACTCCCGT 3790 GCGACTGATATATGTGCTCCGGACCG 3790 GCGACTGATATATGTGCTCCGGACCG 3790 GCGACTGATATATGTCCTCCGAACCACCACCACCACCACCACCCCCCCC	0	3760	GGTGTTACACCGCTTCGTTGTCCT	
3763 ACCCATTCCTCTGCGGCGATCAA 3764 TCGCAGGTGTAGACGGACGAAAAG 1764 TCGCAGGTGTAGACGGACGAAAAG 3765 CTCTTGCGTAGTAATCGGCCCGCA 3766 TTCCGTGTCACGCGAGCCTGCTTT 3767 ACTCTAAGTAGGGCTGGGTCGCGA 3768 TTGGTGGCTGTAAAGGTGCTTGGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTTCCCGCAA 3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGGCGCCAC 3774 ACCCGTTAAGTCGACGCCTGCGGG 3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAACGCTGCCAGC 3777 AGCAACGAGTTTATGAGCGCAGCA 3778 TGGGAAACGATTTATGAGCGCAGGA 3779 TCTGTGTTGCCCCACCTACAGCAA 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGAGA 3786 CTGCAGCACGTCACAGCTACAGCAA 3787 CCGTTTTGCTCCAGCTATAGAGCGT 3788 ATTTGTGCCCCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3789 TAAGCAGAAAGCCGCAACTCCGGT 3789 TAAGCAGAAAGCCGCAACTCCGGT 3789 TAAGCAGAAAGCCGCAACTCCGGT 3789 TAAGCAGAAAGCCGCAACTCCGGT 3789 TAAGCAGAAAGCCGCAACTCCCGGT 3789 TAAGCAGAAAGCCGCAACTCCGGT 3789 TAAGCAGAAAGCCGCAACTCCCGGT 3780 GCGACTGATATAGTGCTCCGAACCG		3761	ACAATAATAAGGGAGCATCGGCCG	
3764 TCGCAGGTGTAGACGGACGAAAAG	[3762	TCGGGTCCTATGATCCAGTCCCAA	
3765 CTCTTGCGTAGTAATCGGCCCGCA 3766 TTCCGTGTCACGCAGCCTGCTTT 3767 ACTCTAAGTAGGGCTGGTCGCA 3768 TTGGTGGCTGTAAAGGTGCTTGGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTTCCCGCAA 3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGGCGGCCAC 3774 ACCCGTTAAGTCGACGCCTGCGGG 3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGCA 3778 TGGGAAACGAATGGGTGGCGAGA 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCGCGGGT 3781 GAACGAGGTCCGGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACTGCGCCTTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATAGAGCGT 3788 ATTTGTGCCCCACTATGAGCGT 3789 TAAGCAGAAAGCCGCAACTCCGGT 3780 GCGACTGATATAGTGCTCCGACCG 3780 TAAGCAGAAAGCCCCAACTCCGGT 3780 TAAGCAGAAAGCCGCAACTCCCGT 3780 GCGACTGATATAGTGCTCCGACCG	[3763	ACCCATTCCTCCTGCGGCGATCAA	
3766 TTCCGTGTCACGCGAGCCTGCTTT 3767 ACTCTAAGTAGGGCTGGGTCGCGA 3768 TTGGTGGCTGTAAAGGTGCTTGGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTTCCCGCAA 3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGGCGGCCAC 3774 ACCCGTTAAGTCGACGCCTGCGGG 3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGAGTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCCCGAAGCAGCACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAACCATCAGCACCATGGG 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACCATATGAGAC 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGAGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3789 TAAGCAGAAAGCCGCAACTCCGGT 3789 TAAGCAGAAAGCCCGCAACCCGGT 3789 TAAGCAGAAAGCCCGCAACCCGGT 3789 TAAGCAGAAAGCCCGCAACCCGGT 3789 TAAGCAGAAAGCCCGCAACCCGGT 3780 GCGACTGATATAGTGCTCCGGACCGGT 3789 TAAGCAGAAAGCCCGCAACTCCCGGT 3789 TAAGCAGAAAGCCCGCAACTCCCGGT 3780 GCGACTGATATAAGTGCTCCGGACCG		3764	TCGCAGGTGTAGACGGACGAAAAG	
3767 ACTCTAAGTAGGGCTGGGTCGCGA 3768 TTGGTGGCTGTAAAGGTGCTTGGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTTCCCGCAA 3771 ATGACGGAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGGCGGCCAC 3774 ACCCGTTAAGTCGACGCCTGCGGG 3775 TTCGATGGAACGGCTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGATG 3779 TCTGTTGTTCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTCG 3784 TTTACAAAAGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCAGTACCAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTCCCACCTATGAGCGT 3788 ATTTGTCCCGCATTCGGGTTATTCC 3789 TAAGCAGAAAGCCCCAACTCCGGT 40 3790 GCGACTGATATAGTGCTCCGACCGGTCACACCCGGTCCCCGGT 40 3790 GCGACTGATATAGTGCTCCGACCGGTCCCCCCCCCCCCC	5	3765	CTCTTGCGTAGTAATCGGCCCGCA	
3768 TTGGTGGCTGTAAAGGTGCTTGGC 3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTTCCCGCAA 3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGCGGCCAC 3774 ACCCGTTAAGTCGACGCCTGCGGG 3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGGTTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTCCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 3790 GCGACTGATATAGTGCTCCGACCGGCCCGGACCCCGCGCCCCGCCCCCCCC		3766	TTCCGTGTCACGCGAGCCTGCTTT	
3769 CCGAATTACCCATTCATACGGCAC 3770 GATGGATAGGTTCGCTTCCCGCAA 3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGGCGGCCAC 3774 ACCCGTTAAGTCGACGCCTGCGGG 3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGGTTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 3790 GCGACTGATATAGTGCTCGGACCG		3767	ACTCTAAGTAGGGCTGGGTCGCGA	
3770 GATGGATAGGTTCCCGCAA 3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGGCGGCCAC 3774 ACCCGTTAAGTCGACGCCTGCGGG 3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGATG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGGTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTCCTGAAATTCGT 3787 CCGTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 3790 GCGACTGATATAGTGCTCGGACCG 40 40 3790 GCGACTGATATAGTGCTCGGACCG 40 40 3790 GCGACTGATATAGTGCTCGGACCG 40 40 40 40 40 40 40 4		3768	TTGGTGGCTGTAAAGGTGCTTGGC	
3771 ATGACGGAAAGAATGTGATTCGGC 3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGGCGGCCAC 3774 ACCCGTTAAGTCGACGCCTGCGGG 3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGGTTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 3790 GCGACTGATATAAGTGCTCGGACCG		3769	CCGAATTACCCATTCATACGGCAC	
3772 ACGGTTCGGCTTCTGTTAGTCACG 3773 GGATCCCGTAATTGAGGCGGCCAC 3774 ACCCGTTAAGTCGACGCCTGCGGG 3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGAGA 3779 TCTGTGTTGCCCCACCTACAGCAA 30 3780 CCTGCATTGGATGTACCCGCGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 3790 GCGACTGATATAGTGCTCGGACCG	:0	3770	GATGGATAGGTTCGCTTCCCGCAA	
3773 GGATCCCGTAATTGAGGCGGCCAC 3774 ACCCGTTAAGTCGACGCCTGCGGG 3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGGTTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 3790 GCGACTGATATAGTGCTCGGACCG		3771	ATGACGGAAAGAATGTGATTCGGC	
3774 ACCCGTTAAGTCGACGCCTGCGGG		3772	ACGGTTCGGCTTCTGTTAGTCACG	
3775 TTCGATGTGAACGGTTGGCCAACC 3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGGTTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3790 GCGACTGATATAGTGCTCGGACCG		3773	GGATCCCGTAATTGAGGCGGCCAC	
3776 TCGATCGGGAGTCTACCGCCATGT 3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGGTTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT	Î	3774	ACCCGTTAAGTCGACGCCTGCGGG	
3777 AGCAACGAGTTTATGAGCGCAGGA 3778 TGGGAAACGAATGGGTGGCGGTTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 GCGACTGATATAGTGCTCGGACCG	25	3775	TTCGATGTGAACGGTTGGCCAACC	
3778 TGGGAAACGAATGGGTGGCGGTTG 3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 3790 GCGACTGATATAGTGCTCGGACCG		3776	TCGATCGGGAGTCTACCGCCATGT	
3779 TCTGTGTTGCCCCACCTACAGCAA 3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 GCGACTGATATAGTGCTCGGACCG		3777	AGCAACGAGTTTATGAGCGCAGGA	
3780 CCTGCATTGGATGTACCCGCGGGT 3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 3790 GCGACTGATATAGTGCTCGGACCG		3778	TGGGAAACGAATGGGTGGCGGTTG	
3781 GAACGAGGTCCGGGTTTGCATCTC 3782 GGCGCCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3790 GCGACTGATATAGTGCTCGGACCG		3779	TCTGTGTTGCCCCACCTACAGCAA	
3782 GGCGCGAAGCAGAACGACCATAT 3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3790 GCGACTGATATAGTGCTCGGACCG	30	3780	CCTGCATTGGATGTACCCGCGGGT	
3783 AGGCATCACGCATCAGGTACTTGG 3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3790 GCGACTGATATAGTGCTCGGACCG		3781	GAACGAGGTCCGGGTTTGCATCTC	
3784 TTTACAAAAGCATCGGCCCTGGGA 3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3790 GCGACTGATATAGTGCTCGGACCG	'	3782	GGCGCCGAAGCAGAACGACCATAT	
3785 CCCAGGCGGTCAACCAATTGTAGA 3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3790 GCGACTGATATAGTGCTCGGACCG		3783	AGGCATCACGCATCAGGTACTTGG	
3786 CTGCAGCACGTGCCTGAAATTCGT 3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3790 GCGACTGATATAGTGCTCGGACCG		3784	TTTACAAAAGCATCGGCCCTGGGA	
3787 CCGTTTTGCTCCAGCTATGAGCGT 3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 3790 GCGACTGATATAGTGCTCGGACCG	35	3785	CCCAGGCGGTCAACCAATTGTAGA	
3788 ATTTGTGCCGCATTGGGGTTATTC 3789 TAAGCAGAAAGCCGCAACTCCGGT 40 3790 GCGACTGATATAGTGCTCGGACCG		3786	CTGCAGCACGTGCCTGAAATTCGT	
3789 TAAGCAGAAAGCCGCAACTCCGGT 3790 GCGACTGATATAGTGCTCGGACCG		3787	CCGTTTTGCTCCAGCTATGAGCGT	
40 3790 GCGACTGATATAGTGCTCGGACCG	•	3788		
		3789		
	40	3790	GCGACTGATATAGTGCTCGGACCG	
		3791	AACTCTATTCTGACACCGCCCGAA	
3792 GTGCGCTCCAAGAAGAACACACC		3792	GTGCGCTCCAAGAAGAAACACACC	

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Γ	3793	ACGACCAGCGGTCTGAGATCTAGG
	3794	ATCCCCTCCTCAGGTCGACGCTGT
	3795	TGACATACGCGTCACCCAGCACAG
	3796	TAACCGCGACTCTGACTCCCTTGT
5	3797	AAGCGGTTTGATCTGTGCAATCGG
Ť	3798	CTGTCAACTCGGTCGTCCGCACAG
Ī	3799	AACTTTGCCGTTTAGGGCAGGTGA
<u> </u>	3800	GCTGAAGAACTCCCAATTCGCTGG
	3801	AAGATGCGATGGGTCAGTCCTCGT
0	3802	ACCCACCTCTGAAGGTTGAGACGG
	3803	AGGCTACGCACCCTCGAGAGTGAC
Ţ	3804	CGGTCACGAACGTGGTCCAGTTTT
	3805	CAAAGCAACGCGCGCCACTTAAAA
	3806	ACGAGGAAGGAACTGATCCCCAGT
15	3807	TTCGCCACTATGGGCTCAGCATTA
. 1	3808	CGCTCGGCAGAGGAGTCCACTCAC
·	3809	TGTTGGCACGACTCCGTCCATGAA
·	3810	TGCCTACCCGGTGATTGCGACATC
	3811	CAACGGTCGGATCTGAGGAGATCT
20	3812	CGTTACGAAGCGAAGTTCCCGAGT
	3813	AGTGACGCCAAAGTCGCCATTCT
	3814	ATTCAGCTGGGCATAGGCGATGGG
	3815	TAGGACAGCGTGGCTACACA
	3816	AATTTGTCCAGCTCTGCACGACCG
25	3817	TGAGTGGGCTGTGATCCGTTCCAC
	3818	TGTGGTGACACGCCAGAGCTGGTT
	3819	CCTCACAGGTGTGAGAGGAGCCGC
	3820	AGTCCCGCTTCTGCAAATTCCGAA
	3821	TCTGCGCCTACCCGTAAGCTGAAC
30	3822	GCCTCCTGAGTTGATTCATGCATG
	3823	CCTAACGGTTGGTTCGCCGTTTTT
	3824	TCGCAAACCCACGAATGAGTCCCG
	3825	AGTGCTAAGGTGGGCGAGCAGAGG
	3826	CTGGAGACTGCGATGGCAGGGTTG
35	3827	AAGGGATAGTGATGGCGATGGACG
	3828	CTATCCACGGTGATGTCCGCCATT
	3829	CGGACTAGAACTTGCCAAGCACGA
•	3830	AGAGCCGGATGGCATTGCATGAAC
	3831	AGTTGGCTAGCGGTCGAATGAGCA
40	3832	GCATGCGGTCACCGCTTCATCTAA
	3833	GTGAGATTCCAAGCTCGCCGGTGA
	3834	GCCATCCACCGCACAATGAACGCT

	3835	GGGTGGTCCTCACTGTGGTTGGCA
	3836	AGGCGGCTACGACGAGCGTCGTTA
	3837	GCCAAGTGATCGTGCTTCCGCGTA
	3838	TAGCCGTTTATTCCCTTGATGCGC
	3839	ACTATGTGGGACGAGCGTCTGCGA
	3840	GCACCTTCGAGAACCCATCAGATG
	3841	ATTTTCTGTACCGATGCTCACCGG
	3842	CACTGGAGCAATAAATGGCCAGGC
	3843	GGGTTCACGTATCTCATGGATGCG
	3844	GCACGCTCCCAGTATGCTCCTTCA
	3845	GAAGGGACTTAGTCCGCGGCCCTC
	3846	TTCGTTACCCTAAGGGCGTTTGCA
	3847	GTTCCAGGTCACGACGAGCTGCGC
	3848	TCGTACGTAGTCACACCGCGACTT
	3849	GGGCTGGAGTAGCGGTCTGCTATG
	3850	TAGCGGCACTCGTGTTGCGAGTGG
	3851	ACGTTGGGTTCTGACACGGCGATT
	3852	TGTTGCTGCGCCCCAAGTGATCTT
	3853	CCCAGGTCGTTACGGTGCATCACA
	3854	CCTAGTGCACAGGCAAATCGGGCT
	3855	GGCGTTCTCCAAGATAAGGCCAAA
	3856	ACTTCGATACCGTGGACCTCGCCA
	3857	CTGAGCGCGCTAAACGTCCCTAGC
	3858	ATCAGATAAACGATCCGACGCGTC
	3859	CATGGCTGAATTTGTCGACCCTCT
	3860	CGAAAGCGAGCAAATAGAATCCCC
	3861	AGATTGCCCTGCGGCAGGTTGAAT
	3862	AAGAGGCGGCCGATCAGTTAGAAA
	3863	CTGATGCCTGTAAGGAGGCGCTCG
	3864	AATCGCGAGGTTCGGCAGACAAAG
	3865	CGTTGGGACACGGACCGTTCACTC
	3866	AGATGTGCACTCGCGGTCATTT
	3867	CAACTCGAGTGGCGGTAACATCTG
	3868	ACCAAGGTTGCGATTACGGGAAGC
	3869	CGAAGCGGTAGACGGCTCGCGTTA
	3870	TCTCGCGAACAGGAGGGAAGGCGT
	3871	GTCCCGATTTGCGCTGTGAGGAAA
•	3872	TACCACGCGTCGGCACGGAAATGG
	3873	AAATGCTACCCGATTGCGCGGGAT
	3874	TCGATTCAGGTTTGTGCTGCGGAG
Γ	3875	CCATCTCATCCCACTATGGCATGC
	3876	CTGGCCCGTGTTTGGTTGAGTCGA

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3877	GACACACGTTGCAGGGCTTCCC
3878	TCGAATCGAGTCGATCGTGAAGGT
3879	GAAAGCACTCGATCGCGTTGGATT
3880	AATTACGCGAACATGGGGCGTCAA
3881	GTGCTAACACTGTGGTCGTTCCCA
3882	GGTAAGCGCCAGCCAGGAGTTGTC
3883	GGCGATCGTTCAGGAATCGCGTCA
3884	CTGGCTAGACCTCCGACACAGGCT
3885	CGGGTTAAACGCCAACTGGCCTAG
3886	ATCGCAGCCTGGCCGCCTAGTTTT
3887	GGCGTAGCCTAGCAAATTATGCCA
3888	ATGACGCGACGGAGACAATACGGC
3889	GTTGCATCACGAAAATGCCGTCTT
3890	GAGTCATGCGTTCCTCGCTTTACC
3891	TCTGAACCGGTTATCCCCAACCTC
3892	TGCCTCTGGTAGGCGCCCAGTTAC
3893	CTGACGGTTTTCATTCGGCGTGCC
3894	TGAACACGAGCAACACTCCAACGC
3895	CGGCGCGAAAGACTTGAACTTG
3896	GCTACGAGTACCCGTCGGAAACGC
3897	ATACCCAACAGCATGGAGCGACCA
3898	ATCGCATCGCATCGTATTCACGGG
3899	CGGCCTAGAGGTGCGAAAGCTATC
3900	TAACGCTTTTCCGAGGCCGATTCT
3901	TCTGTCCTAGCACGCCGACCTGCT
3902	CTCATCGTTCAGTCGGTCGTCGTA
3903	TCGTCGAGCAGATAGCGGGGTAGG
3904	TCGACCACAGTCAGGACACTACCG
3905	TGCGATTCTATGATGTCCGAACGC
3906	CAAATGCAATGGCAAGCACTCACC
3907	TCTAATCCATCGTTTTTTGGGCGA
3908	TCTCAACTCCGGTACGACGAAACA
3909	CTGAAGAGGGTAGCCTGGGAGCGG
3910	GGCACAATTAAAACGCGCCGCGTT
3911	CAAAGGAGGTCAAAGGCCAGAAA
3912	TTTGCGGCCGTGACGAGCAAAAAT
3913	AGGAATGTGCGTGGCACCTGTGGA
3914	TCGTGATGACTGCCTTCCGAATCA
3915	CACGTCGACATGTTTGGTACCTCG
3916	TTGCGGTAGTTTGGTTACCACCGT
3917	GCAGTGGCGACAAATACAGCTGAG
3918	ACGGCATGATGGAGGGATAAACGT

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3919	TGGGATAATCCGCAAGCGCATAGC
3920	CCTAGCTCTGCGCTCTTTGCGC
3921	TCCTGGAACTGCTGAAGGCGACTT
3922	CGAAGGCGCATGGTGTAGTCTCC
3923	AACATTGTTCCCATCCCAGAGCAC
3924	CCAGGCAAGAACAACCACGCGCT
3925	AAATCCACAGGCGCGCCAAAGCTG
3926	GCTCACCGCAGACTCCGCGCGATA
3927	TAGGTGGCGAGAGAGCGCCCACAA
3928	GGCGTTGGTGTCGGGACCATGA
3929	TCTGAATGCTTCCGTGCTTTCGTG
3930	ACGCTCTGGACCTCGCTCATTCGA
3931	TCCTTTATGCGCAGCGCTCGTGTT
3932	TTGCCGTCCTGCAGCAGGTAGCTC
3933	GGTCTAGTGGCAGCAAGGAGCGAT
3934	GGTAACGCGACCAGCTTAGACACC
3935	GTGGCGATTGGCTTCCTATGCATA
3936	TCAAAATACGGCCAGGAAGGGCAA
3937	TGCCATGCAGTCAGGTACGATGGT
3938	ACAGGTTACGTCGTGTTCCCGT
3939	CTCATGACGAACGAGCGGTCTGCA
3940	GTCGTGCGAGAGGCCAAGACCTTA
3941	GCTGGCTGACGCTGTTGTCAGAGG
3942	GCTACAGTGCTGCGTCCCGTGCCT
3943	TTTACGAGCACCAAGCTGGCGTAG
3944	ACGAGTTGACGGTCGTAGGGACCG
3945	TCGGATGGTAGGAGGCGAGATCGG
3946	ATTATGCAGATCCTGTGCATCCGC
3947	AGGGATGGAGACGAAGGAAGCATT
3948	ACCCAGGACCCGTATTCCCTAGC
3949	GCACCATCCTGGGGCTTCTCAATG
3950	TACAATCCGTGGACGTTTGCTCAG
3951	GGTAGGCGAATCCGACTGGCATAG
3952	AGGACCGAACCCATGTGCAGCATC
3953	ATACACCGCACAGAAGCACAGCTG
3954	TCCTTGGCGGCCGTGTTTTATTG
3955	CTCCACGCGAAGGGCGCTTGTAAC
3956	TGGCCCTGCCATCCTCGGATTCAG
3957	TGTCTATTCGCCAGCGTGAGCATC
3958	TGTTGTTGGCACGCCTCTACGGCA
3959	GTGCCTCAACCGTATCGTGGCGGT
3960	TCCTCGAAGTAGCGTGACCGAACC

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	3961	AAACAATTTCCTGCACTCTCGGCC
	3962	CACAAACTCGTCGAGGCACACAGT
Γ	3963	GACGAAACGCTCGGCAGAAAGCCT
	3964	TCAACTCACACGGGACAGCAGTTC
Γ	3965	TCACGTGGATGGGCTTAGCTGGGC
Γ	3966	AGGTGTTTGTTCCGACTGGCCACA
	3967	TCAACCCTCTATTCCCGAGCATTG
	3968	ACCTCACACAGCGTTCTCGTCGA
Γ	3969	AACAGCATGCGGTCGCTGGCTTTC
	3970	CACGGACACGTGTTACATCCGATG
Γ	3971	CTGGGAGCCTGCTGATACATGGTG
	3972	CGTCCTATGGGCCATGCCAGGAT
Γ.	3973	GTCCCCAAATCTCGCTTTACAGGC
	3974	TCACAAACCTGTGCGTGCATTGTC
	3975	CACACTCGTGGCCTGCGTTGGGAA
	3976	GCCTGCACTTACGGCTATCTCGCC
Ţ.	3977	TTGGCGTGGCGATTACCTGTTATT
	3978	TTTGCGGCTGAAGTTTACAGGGTG
Γ	3979	CACTTAAGGGGCTGACCGAGCAAC
	3980	AGAAAACGTCAATCCGCCACCTTT
ļ	3981	AACAAAACGGCGCTCCAACAAACG
Ţ	3982	GCCTCAATATCTGGTTGCCGCCTG
Ţ	3983	TTCCACAGTCAATGATGGGCGTGC
	3984	GATTCCCAGTCTACCCGCGAGCAT
	3985	AGGCCAATTACGACCCTGTCACGG
	3986	CATGCGAACGTTCCGAGGAGACGG
ľ	3987	CACACGCGATGGGTTGTGTGACGC
Ī	3988	TCCGGTATTGCGCAGGAACCATAG
Ţ	3989	AAGATTAGGTGTGCCCGCCTCAGG
Ţ	3990	TCGTTACGCCCCGACTCGACGATG
Ţ	3991	ACTAAAATCGCCAGGTTGCTCCCT
Ţ	3992	AGGATGGCCACGCCGAATCAAAGT
Ţ	3993	TGATGAAGCAGCTCATCGCTGGCG
Ţ	3994	CCCCGATGGGTCTTTGTTGGACTC
ļ	3995	ACACGAGGCTGCTGGTGAGGGCT
Ì	3996	TGGTCACCAATTTGATGATCCGAG
į	3997	AAGGCCGCTTGCATGCGACAAATT
	3998	CCAGTGTTCGTTCATCGGTGGCGT
ŀ	3999	CCGACCGCTACATAGGTGTGCGAA
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TABLE 2

Seq. ID No.	Decoder Sequence (5'-3')	Probe Sequence (5'-3')
1	TTCGCCGTCGTGTAGGCTTTTCAA	TTGAAAAGCCTACACGACGGCGAA
2	TTCGAAGCGCACGTCCCTTTTCAA	TTGAAAAGGGACGTGCGCTTCGAA
3	AACGCGTGGGGAATGGGACATCAA	TTGATGTCCCATTCCCCACGCGTT
4	CCGTCGCATACCGGCTACGATCAA	TTGATCGTAGCCGGTATGCGACG
5	ATGGCCGTGCTGGGGACAAGTCAA	TTGACTTGTCCCCAGCACGGCCAT
6	TTGCAACGGCTGGTCAACGTCAA	TTGACGTTGACCAGCCCGTTGCAA
7	CGCATAGGTTGCCGATTTCGTCAA	TTGACGAAATCGGCAACCTATGCG
8	CCGTTTGCGGTCGTCCTTGCTCAA	TTGAGCAAGGACGACCGCAAACG
9	TTCGCTTTCGTGGCTGCACTTCAA	TTGAAGTGCAGCCACGAAAGCGA
10	GTCCAACGCGCAACTCCGATTCAA	TTGAATCGGAGTTGCGCGTTGGA
11	TTGCCGCACCGTCCGTCATCTCAA	TTGAGATGACGGACGGTGCGGCA
12	CATCGTCCCTTTCGATGGGATCAA	TTGATCCCATCGAAAGGGACGATC
13	GCACGGGAGCTGACGACGTGTCAA	TTGACACGTCGTCAGCTCCCGTG
14	AGACGCACCGCAACAGGCTGTCAA	TTGACAGCCTGTTGCGGTGCGTC
15	CGTGTAGGGGTCCCGTGCTGTCAA	TTGACAGCACGGGACCCCTACAC
16	CATCGCTGCAAGTACCGCACTCAA	TTGAGTGCGGTACTTGCAGCGAT
17	GGCTGGTTCGGCCCGAAAGCTTAG	CTAAGCTTTCGGGCCGAACCAGC
18	GTTCCCAGTGAAGCTGCGATCTGG	CCAGATCGCAGCTTCACTGGGAA
19	TACTTGGCATGGAATCCCTTACGC	GCGTAAGGGATTCCATGCCAAGT
20	ACTAGCATATTTCAGGGCACCGGC	GCCGGTGCCCTGAAATATGCTAG
21	GAACGGTCAATGAACCCGCTGTGA	TCACAGCGGGTTCATTGACCGTTC
22	GCGGCCTTGGTTCAATATGAATCG	CGATTCATATTGAACCAAGGCCGC
23	GATCGTTAGAGGGACCTTGCCCGA	TCGGGCAAGGTCCCTCTAACGAT
24	TGGACCTAGTCCGGCAGTGACGAA	TTCGTCACTGCCGGACTAGGTCC
25	ATAAACTACCCAGGACGGGCGGAA	TTCCGCCCGTCCTGGGTAGTTTAT
26	CATCGGTTCGCGCCAATCCAGATA	TATCTGGATTGGCGCGAACCGATC
27	GTCGGGCATAGAGCCGACCACCCT	AGGGTGGTCGGCTCTATGCCCGA
28	CTTGGGTCATGATTCACCGTGCTA	TAGCACGGTGAATCATGACCCAAC
29	TGCCTAACGTGCTAATCAGCAGCG	CGCTGCTGATTAGCACGTTAGGCA
3 <u>,</u> 0	CGCATGTTGGAGCATATGCCCTGA	TCAGGGCATATGCTCCAACATGC
31	AGCCACTGCATCAGTGCTGTTCAA	TTGAACAGCACTGATGCAGTGGC
32	GGTTGTTTTGAGGCGTCCCACACT	AGTGTGGGACGCCTCAAAACAAC
33	TCGACCAAGAGCAAGGGCGGACCA	TGGTCCGCCCTTGCTCTTGGTCG
34	GACATCGCTATTGCGCATGGATCA	TGATCCATGCGCAATAGCGATGTC
35	GAAATACGAAGTCTGCGGGAGTCG	CGACTCCCGCAGACTTCGTATTTC
36	TGTCATGAATGATTGATCGCGCGA	TCGCGCGATCAATCATTCATGACA
37	ATATCGGGATTCGTTCCCGGTGAA	TTCACCGGGAACGAATCCCGATAT

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38	GCGAGCGTACCGAAGGGCCTAGAA	TTCTAGGCCCTTCGGTACGCTCGC
39	TTACCGGCAGCGGACTTCCGAATT	AATTCGGAAGTCCGCTGCCGGTAA
40	GTAATCGAGAGCTGCGCGCCGTCT	AGACGGCGCGCAGCTCTCGATTAC
41	CCTGTTAGCGTAGGCGAGTCGATC	GATCGACTCGCCTACGCTAACAGG
42	TAGCGGACCGGCAGAATGAGTTCC	GGAACTCATTCTGCCGGTCCGCTA
43	GGTACATGCACTACGCGCACTCGG	CCGAGTGCGCGTAGTGCATGTACC
44	AATTCATCTCGGACTCCCGCGGTA	TACCGCGGGAGTCCGAGATGAATT
45	GCCAAATCTGGATTGGCAGGAATG	CATTCCTGCCAATCCAGATTTGGC
46	TGCATTTTCGGTTGAGGCACATCC	GGATGTGCCTCAACCGAAAATGCA
47	CCGCTCAATTCACCATGCTTCGCT	AGCGAAGCATGGTGAATTGAGCGG
48	CTCGGAAAGGTGCAACTTTGGTGT	ACACCAAAGTTGCACCTTTCCGAG
49	AATTCGACCAGCAGAACGTCCCAT	ATGGGACGTTCTGCTGGTCGAATT
50	GCCAGAGTCTCAACCTCACGGGAT	ATCCCGTGAGGTTGAGACTCTGGC
51	CCAACAACTGGAACGGGAACCCGC	GCGGGTTCCCGTTCCAGTTGTTGG
52	GAGAACTGATCGCTGAGGGGCATG	CATGCCCCTCAGCGATCAGTTCTC
53	GGCACACTAGACTTGTGGCACCGA	TCGGTGCCACAAGTCTAGTGTGCC
54	TCACATCCAAATATGGTCCGCGAA	TTCGCGGACCATATTTGGATGTGA
· 55	GTCTGCCGGTGTGACCGCTTCATT	AATGAAGCGGTCACACCGGCAGAC
56	CATCGCAGAGCATAAACACCCTCA	TGAGGGTGTTTATGCTCTGCGATG
57	GTTGGTATCTATGGCAGAGGCGGA	TCCGCCTCTGCCATAGATACCAAC
58	ACGAGGTGCCGCTGAGGTTCCATT	AATGGAACCTCAGCGGCACCTCGT
59	GGAATGAGTGGACCCAGGCACATT	AATGTGCCTGGGTCCACTCATTCC
60	TGTCAATATGCGTCCGTGTCGTCT	AGACGACACGGACGCATATTGACA
61	TGATGAGCCTCAGGGTACGAGGCA	TGCCTCGTACCCTGAGGCTCATCA
62	CACCGCGGTGTTCCTACAGAATGA	TCATTCTGTAGGAACACCGCGGTG
63	TTGTTGCCAATGGTGTCCGCTCGG	CCGAGCGGACACCATTGGCAACAA
64	TTAACCTGCGTCTGCCCCTTTCCT	AGGAAAGGGGCAGACGCAGGTTAA
65	AGGCGCGTTCCTGCCTTAGTGACG	CGTCACTAAGGCAGGAACGCGCCT
66	TAGGGCGATGGCACGAAGCTTCAA	TTGAAGCTTCGTGCCATCGCCCTA
67	TGCATAGAGCCAAAGTCGGCGATG	CATCGCCGACTTTGGCTCTATGCA
68	TTGAGAGGCAGGTGGCCACACGGA	TCCGTGTGGCCACCTGCCTCTCAA
69	TCCGCATTGTGAGAAAAAACGAGC	GCTCGTTTTTTCTCACAATGCGGA
70	GGCGGTTTCCGTAGCTATAGGTGC	GCACCTATAGCTACGGAAACCGCC
71	GGTGAAAATTTCGTAGCCACGGGC	GCCCGTGGCTACGAAATTTTCACC
72	CCGACGGAGGATGAAGACAATCAC	GTGATTGTCTTCATCCTCCGTCGG
73	CCAGTTTGGCCCAATTCGCCAAAA	TTTTGGCGAATTGGGCCAAACTGG
74	GGATCTATTAGGCCGTGCGCACAG	CTGTGCGCACGGCCTAATAGATCC
75	CGGATGTCACCGTTTGGACTTTCA	TGAAAGTCCAAACGGTGACATCCG
76	ATCGCAAATCCTGCTCGTCCCTAA	TTAGGGACGAGCAGGATTTGCGAT
77	CAGGGCATGCAATAATCGAGGTTC	GAACCTCGATTATTGCATGCCCTG
78	CATGCGTTGATATATGGGCCCAAG	CTTGGGCCCATATATCAACGCATG

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	79	CAGCTGCAGCTTGTGACCAACCAC	GTGGTTGGTCACAAGCTGCAGCTG
	80	TTGTATGTCTGCCGACCGGCGACC	GGTCGCCGGTCGGCAGACATACAA
	81	GATGGCGCCCGTTGATAGGTATGG	CCATACCTATCAACGGGCGCCATC
	82	ATGAGAATCGCCGGCAATCTGCTA	TAGCAGATTGCCGGCGATTCTCAT
5	83	ATTTGCACTGACCGCAGGCTCGTG	CACGAGCCTGCGGTCAGTGCAAAT
	84	CAGGGAGAACGGTTAAGTTCCCGT	ACGGGAACTTAACCGTTCTCCCTG
	85	AGGCCGGCGATCGAGGAGTTTGGT	ACCAAACTCCTCGATCGCCGGCCT
	86	ACACGGTGGTCTCTGATAGCGACC	GGTCGCTATCAGAGACCACCGTGT
	87	GTGCAACGCCGAGGACTTCCATCA	TGATGGAAGTCCTCGGCGTTGCAC
10	88	TCGGTGCCTGATAGCCATTCCGAT	ATCGGAATGGCTATCAGGCACCGA
	89	TGAAATACCACACAGCCAATTGGC	GCCAATTGGCTGTGTGGTATTTCA
	90	GCATCGTGTACATGACTGCCGCGA	TCGCGGCAGTCATGTACACGATGC
	91	CAGTGTTCTAACGGCGCGCGTGAA	TTCACGCGCGCCGTTAGAACACTG
	92	CGCTTGCAACGTTGCACCTACTCT	AGAGTAGGTGCAACGTTGCAAGCG
15	93	CGAAAAACTAGTGGGCTCGCCGCG	CGCGGCGAGCCCACTAGTTTTCG
	94	CTTTCAGGGGAACTGCCGGAGTCG	CGACTCCGGCAGTTCCCCTGAAAG
	95	TTGTGGCCTTCTTGTAAAGGCACG	CGTGCCTTTACAAGAAGGCCACAA
	96	TCCACGAACGGCGACCCGTTGTCT	AGACAACGGGTCGCCGTTCGTGGA
	97	CGACCTTGCACGAAACCTAACGAG	CTCGTTAGGTTTCGTGCAAGGTCG
20	98	GTGCAGCTTCACGAGCCAGCCTGA	TCAGGCTGGCTCGTGAAGCTGCAC
	99	CGCTTTCGTGCGAATAGACGATGA	TCATCGTCTATTCGCACGAAAGCG
	100	TGCGCTTACAGGCTCCTAGTGGTC	GACCACTAGGAGCCTGTAAGCGCA
	101	CACGCGCTTAGTCGCGATCGCATA	TATGCGATCGCGACTAAGCGCGTG
	102	CGGAGGGAGGGAGCTAGCCTTCGA	TCGAAGGCTAGCTCCCTCCG
25	103	GCATCCGGCCTGTTGATGACGCCT	AGGCGTCATCAACAGGCCGGATGC
	104	AGGCCAATCGATCTTATTGCCGAG	CTCGGCAATAAGATCGATTGGCCT
	105	CCTTCCAATGATTGCATACGCCCA	TGGGCGTATGCAATCATTGGAAGG
	106	AACACTTGATCAGGCGGGTCGTCT	AGACGACCCGCCTGATCAAGTGTT
	107	TGGAATCAAGGCCGTAAAGGACAG	CTGTCCTTTACGGCCTTGATTCCA
30	108	GCTCCCGTAACCTGTCCACCAGTG	CACTGGTGGACAGGTTACGGGAGC
	109	AGTGGTGAATGGCCGCTACCCTGA	TCAGGGTAGCGGCCATTCACCACT
	110	TGTTGAAGCGAGCTAAAACGGCCA	TGGCCGTTTTAGCTCGCTTCAACA
	111	CAGCGCTCCAGAATTGACAGCAAT	ATTGCTGTCAATTCTGGAGCGCTG
	112	AAGGTGGTGCCATTCATTTGGCTA	TAGCCAAATGAATGGCACCACCTT
35	113	CGTTAAACCGCAATCCGTTCGGCT	AGCCGAACGGATTGCGGTTTAACG
	114	CACGAGATACCGGCGTAAGGGTGG	CCACCCTTACGCCGGTATCTCGTG
	115	CTACGGCAAACGTGTGGAATGGGT	ACCCATTCCACACGTTTGCCGTAG
	116	GTAGGGCGATGACGGCGAACTAC	GTAGTTCGCCCGTCATCGCCCTAC
Į	117	AATCGACCTCCGCACACATTCGCA	TGCGAATGTGTGCGGAGGTCGATT
40	118	GAGTCAGCATGGCGGCGGAGATTC	GAATCTCCGCCGCCATGCTGACTC
Į	119	AGATAAAGACGCTGGCAACACGGG	CCCGTGTTGCCAGCGTCTTTATCT
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	120	GGTACCTCAACGCGAACCACTTGT	ACAAGTGGTTCGCGTTGAGGTACC
	121	AAGCGATGGCTACCCAAGAGCGAT	ATCGCTCTTGGGTAGCCATCGCTT
	122	AGAGCTTATGCAGAACCAGGCGCC	GGCGCCTGGTTCTGCATAAGCTCT
	123	ATCGGTCTCACGCAGGGTTGGATA	TATCCAACCCTGCGTGAGACCGAT
5	124	TAGGTTGCCCGCCAGAAGAAACAT	ATGTTTCTTCTGGCGGCCAACCTA
	125	CGGTGCTGTTGCAAAAGCCTGTAG	CTACAGGCTTTTGCAACAGCACCG
	126	TGATGAAAGTTTGCGGCAGGACAC	GTGTCCTGCCGCAAACTTTCATCA
	127	GTTGAGTGCAGGATGCAGCGATAG	CTATCGCTGCATCCTGCACTCAAC
	128	AACATTGCGCGGTCCACCAGGGTT	AACCCTGGTGGACCGCGCAATGTT
10	129	GGGCAGTTAGAGAGGGCCAGAAGT	ACTTCTGGCCCTCTCTAACTGCCC
	130	TCGAGCTGGTCCCCGTGAACGTGT	ACACGTTCACGGGGACCAGCTCGA
	131	GTCTTGGGGGCCGCTTAGTGAAAA	TTTCACTAAGCGGCCCCCAAGAC
	132	ACTGTTGGCTTGCTCTCATGTCCA	TGGACATGAGAGCAAGCCAACAGT
	133	AGGACCATTCGGAAGGCGAAGATA	TATCTTCGCCTTCCGAATGGTCCT
15	134	CTTGGGAGGCATCCGCTATAAGGA	TCCTTATAGCGGATGCCTCCCAAG
	135	AATAAACGGAACGCACCGCTACAG	CTGTAGCGGTGCGTTCCGTTTATT
	136	TTGTACGTGCGGTCCCCATAAGCA	TGCTTATGGGGACCGCACGTACAA
	137	CGCACCAAACTGAGTTTCCCAGAC	GTCTGGGAAACTCAGTTTGGTGCG
	138	ACCTGATCGTTCCCCTATTGGGAA	TTCCCAATAGGGGAACGATCAGGT
20	139	GGAACAGAGGCGAGGGGACTGAGC	GCTCAGTCCCCTCGCCTCTGTTCC
	140	CCCTGCCTTGGCGTGTCGGCTTAT	ATAAGCCGACACGCCAAGGCAGGG
	141	ACTCTGACACGCCAACTCCGGAAG	CTTCCGGAGTTGGCGTGTCAGAGT
	142	CTGACGGTTTTCATTCGGCGTGCC	GGCACGCCGAATGAAAACCGTCAG
	143	TGCGGTGGTTCATTGGAGCTGGCC	GGCCAGCTCCAATGAACCACCGCA
25	144	GCATGGCCAACTAGTGACTCGCAA	TTGCGAGTCACTAGTTGGCCATGC
	145	AGGCCGTAAAGCGAATCTCACCTG	CAGGTGAGATTCGCTTTACGGCCT
	146	CGAATATTATGCCGAGAATCCGCG	CGCGGATTCTCGGCATAATATTCG
	147	ACAGACGAGCTCCCAACCACATGA	TCATGTGGTTGGGAGCTCGTCTGT
	148	GGACGGTTTGTGCTGGATTGTCTG	CAGACAATCCAGCACAAACCGTCC
30	149	AAAGGCTATTGAGTTGGTTGGGCG	CGCCCAACCAACTCAATAGCCTTT
	150	GATGGCCTATTCGGAGATCGGGCC	GGCCCGATCTCCGAATAGGCCATC
	151	GATCCAGTAGGCAGCTTCATCCCA	TGGGATGAAGCTGCCTACTGGATC
	152	AATAACTCGCGCGGGTATGCTTCT	AGAAGCATACCCGCGCGAGTTATT
•	153	GGAGGAGGTTTGTCTCGGAAAGCA	TGCTTTCCGAGACAAACCTCCTCC
35	154	CTTTGGTATGGCACATGCTGCCCG	CGGGCAGCATGTGCCATACCAAAG
	155	AGAAAGGCTCGAGCAACGGGAACT	AGTTCCCGTTGCTCGAGCCTTTCT
	156	AATCTACCGCACTGGTCCGCAAGT	ACTTGCGGACCAGTGCGGTAGATT
	157	CGTGGCGGCCACAGTTTTTGGAGG	CCTCCAAAAACTGTGGCCGCCACG
	158	TTGCAGTTCAATCCATACGCACGT	ACGTGCGTATGGATTGAACTGCAA
40	159	GGCCCAAAGCCCCAGACCATTTTA	TAAAATGGTCTGGGGCTTTGGGCC
	160	CGCCTGTCTTTGTCTCCGGACAAT	ATTGTCCGGAGACAAGACAGGCG

	161	TGAGGCAACAGGGGCCAAAAACTA	TAGTTTTTGGCCCCTGTTGCCTCA
	162	AGCGGAAGTAGTCCTCGGCTCGTC	GACGAGCCGAGGACTACTTCCGCT
	163	GGCCCCAAGGCTTAGAGATAGTGG	CCACTATCTCTAAGCCTTGGGGCC
	164	GCACGTGAAGTTTAACCGCGATTC	GAATCGCGGTTAAACTTCACGTGC
5	165	AGCGGCAGAAACGTTCCTTGACGG	CCGTCAAGGAACGTTTCTGCCGCT
	166	TCGTCGAGCAGACGAGATTGCACG	CGTGCAATCTCGTCTGCTCGACGA
	167	TCTTTGCCGCGTAACTGACTGCTT	AAGCAGTCAGTTACGCGGCAAAGA
	168	TTTATGTGCCAAGGGGTTAACCGA	TCGGTTAACCCCTTGGCACATAAA
	169	TGTTACTGTGGTTCACGGCAGTCC	GGACTGCCGTGAACCACAGTAACA
10	170	CGCGCCTCGCTAGACCTTTTATTG	CAATAAAAGGTCTAGCGAGGCGCG
	171	ACAAATGCGTGAGAGCTCCCAACT	AGTTGGGAGCTCTCACGCATTTGT
	172	CGCGCAGATTATAGACCCGAATGT	ACATTCGGGTCTATAATCTGCGCG
	173	CAAATAACGCCGCTGAATCGGCGT	ACGCCGATTCAGCGGCGTTATTTG
	174	CCTTCGTGCATCGGTGATGATGTT	AACATCATCACCGATGCACGAAGG
15	175	TGAACACGAGCAACACTCCAACGC	GCGTTGGAGTGTTGCTCGTGTTCA
	176	CAGCAGATCCTTCGTAGCGGTCGT	ACGACCGCTACGAAGGATCTGCTG
	177	GGAACCTGGTGAGTTGTGCCTCAT	ATGAGGCACAACTCACCAGGTTCC
	178	TCATAAGCGACAATCGCGGGCTTA	TAAGCCCGCGATTGTCGCTTATGA
	179	CCCAACGTCACTGAAGCTCACAGT	ACTGTGAGCTTCAGTGACGTTGGG
20	180	TGTCAGAGCCCGCGACTCAGACGG	CCGTCTGAGTCGCGGGCTCTGACA
	181	TACACGAAGCCTCTCCGTGGTCCA	TGGACCACGGAGAGGCTTCGTGTA
	182	CTCAGAAGTCCTCGGCGAACTGGG	CCCAGTTCGCCGAGGACTTCTGAG
	183	ATCCTTTTATCTACTCCGCGGCGA	TCGCCGCGGAGTAGATAAAAGGAT
	184	AGGCGTGCAGCAACAGGATAAACC	GGTTTATCCTGTTGCTGCACGCCT
25	185	ACTCTCGAGGGAGTCTCTGGCACA	TGTGCCAGAGACTCCCTCGAGAGT
	186	TTGCCAGGTCCATCGAGACCTGTT	AACAGGTCTCGATGGACCTGGCAA
	187	TCCACTATAACTGCGGGTCCGTGT	ACACGGACCCGCAGTTATAGTGGA
	188	GCCCAGTCGGCTCTAACAAGTTCG	CGAACTTGTTAGAGCCGACTGGGC
	189	CGGAACGGATAATCGGCGTCAGGT	ACCTGACGCCGATTATCCGTTCCG
30	190	TAAAATAAGCGCCTGGCGGGAGGA	TCCTCCCGCCAGGCGCTTATTTTA
	191	GCGCACTCGTGAAACCTTTCTCGC	GCGAGAAAGGTTTCACGAGTGCGC
	192	AGTTTGCCAGGTACTGGCAAGTGC	GCACTTGCCAGTACCTGGCAAACT
	193	ACAACGAGGGATGTCCAGCGGCAT	ATGCCGCTGGACATCCCTCGTTGT
•	194	TTCGCAGCACCCGCTAGGTACAGT	ACTGTACCTAGCGGGTGCTGCGAA
35	195	TAACCCGATTTTTGCGACTCTGCC	GGCAGAGTCGCAAAAATCGGGTTA
	196	CGTCGCATTGCAAGCGTAGGCTTG	CAAGCCTACGCTTGCAATGCGACG
	197	GAGCTGACGTCACCATCAGAGGAA	TTCCTCTGATGGTGACGTCAGCTC
	198	GGAGGCTGGGGGTCGCGCTTAAGT	ACTTAAGCGCGACCCCAGCCTCC
	199	TTGTGGGAACCGCACTAGCTGGCT	AGCCAGCTAGTGCGGTTCCCACAA
40	200	CCCTCGCACTGTGTTCACCCTCTT	AAGAGGTGAACACAGTGCGAGGG
	201	TCATTGACTCGAATCCGCACAACG	CGTTGTGCGGATTCGAGTCAATGA

	202	ACAGGGGTTGGCCTTCGTACGTAC	GTACGTACGAAGGCCAACCCCTGT
	203	AGGCCGTGCAACATCACACAGGAT	ATCCTGTGTGATGTTGCACGGCCT
	204	GGGCCGTGGTCACGTAATATTGGC	GCCAATATTACGTGACCACGGCCC
	205	GCGCGGACATGAAACGACAAGGCC	GGCCTTGTCGTTTCATGTCCGCGC
5	206	CTTATTGGGTGCCGGTGTCGGATT	AATCCGACACCGGCACCCAATAAG
	207	GGGGCGGTTACCAAAAAATCCGAT	ATCGGATTTTTTGGTAACCGCCCC
	208	GCTAAAGCGTGCTCCGTAACTGCC	GGCAGTTACGGAGCACGCTTTAGC
	209	ATCTCATGCATCTCGGTTCGTCGT	ACGACGAACCGAGATGCATGAGAT
	210	ACGAAAAAGTGTGCGGATCCCCT	AGGGGATCCGCACACTTTTTCGT
10	211	CCAAGTACACCGCACGCATGTTTA	TAAACATGCGTGCGGTGTACTTGG
	212	ATCGTGCGTGGAGTGTCGCATCTA	TAGATGCGACACTCCACGCACGAT
	213	TCCAGATACCGCCCGAACTTTGA	TCAAAGTTCGGGGCGGTATCTGGA
	214	TCTGCTGGCAGCACGTGAAGTGGC	GCCACTTCACGTGCTGCCAGCAGA
	215	TTGAAATTGCTCTGCCGTCAGTCA	TGACTGACGGCAGAGCAATTTCAA
15	216	AGTCAGGCGAGATGTTCAGGCAGC	GCTGCCTGAACATCTCGCCTGACT
	217	ACAAGCCGACGTTAAGCCCGCCCA	TGGGCGGCTTAACGTCGGCTTGT
	218	CCCTAATGAGGCCAGTAACCTGCA	TGCAGGTTACTGGCCTCATTAGGG
	219	GTGAGACACACATCCCCTCCAATG	CATTGGAGGGGATGTGTGTCTCAC
	220	CGACGGATGCAGAGTTCAGTGGTC	GACCACTGAACTCTGCATCCGTCG
20	221	CCCGCATGCCTGGCGGTATTACAA	TTGTAATACCGCCAGGCATGCGGG
	222	TTAGCAAAGCGGCGCCGTTAGCAA	TTGCTAACGGCGCCGCTTTGCTAA
	223	CCCGACACGGGTCAGCGTAATAAT	ATTATTACGCTGACCCGTGTCGGG
	224	GCGACGCCCTGAGGTATGTCGTC	GACGACATACCTCAGGGCCGTCGC
	225	CAAAAGTGTGTTCCCTTGCGCTTG	CAAGCGCAAGGGAACACACTTTTG
25	226	TCTCGAAGCACAGCCCGGTTATTG	CAATAACCGGGCTGTGCTTCGAGA
	227	ATGCTAACCGTTGGCCATGGAACT	AGTTCCATGGCCAACGGTTAGCAT
	228	CTTGCGGAGTGTTAGCCCAGCGGT	ACCGCTGGGCTAACACTCCGCAAG
	229	TGCTCCCTAGGCGCTCGGAGGAGT	ACTCCTCCGAGCGCCTAGGGAGCA
	230	CCAATGCCTTTGAGTAAGCGATGG	CCATCGCTTACTCAAAGGCATTGG
30	231	AGCAGATAACGTCCCAATGACGCC	GGCGTCATTGGGACGTTATCTGCT
	232	TTGACCATTACGTGTTGCGCCCAT	ATGGGCGCAACACGTAATGGTCAA
	233	TCGCGTATTTGCGGAATTCGTCTG	CAGACGAATTCCGCAAATACGCGA
	234	CTGCGTGTCAACAATGTCCCGCAG	CTGCGGGACATTGTTGACACGCAG
	235	TCTGGTGCCACGCAAGGTCCACAG	CTGTGGACCTTGCGTGGCACCAGA
35	236	CTCCGGGAGGTCACTTAATTGCGG	CCGCAATTAAGTGACCTCCCGGAG
	237	TTTTCGTGATTGCCCGGAGGAGGC	GCCTCCTCCGGGCAATCACGAAAA
	238	TCGGGATGTAGCTGGGGCTACCGG	CCGGTAGCCCCAGCTACATCCCGA
	239	CGAGCCAACGCAAACACGTCCTTG	CAAGGACGTGTTTGCGTTGGCTCG
	240	GCAAAGCCTTTGTGGGGCGGTAGT	ACTACCGCCCCACAAAGGCTTTGC
40	241	ATTCGACCGGAAATGAGGTCTTCG	CGAAGACCTCATTTCCGGTCGAAT
	242	TTCGCTTGCTGAGTTGCTCTGTTC	GAACAGAGCAACTCAGCAAGCGAA

	243	CGCGTGAAGACCCCATTCCCGAGT	ACTCGGGAATGGGGTCTTCACGCG
	244	AACCGTATTCGCGGTCACTTGTGG	CCACAAGTGACCGCGAATACGGTT
•	245	GGGGCCAACCGTTTCGAGGCGTAT	ATACGCCTCGAAACGGTTGGCCCC
	246	TTCGGCTGGCAGTCCAAACGGCTT	AAGCCGTTTGGACTGCCAGCCGAA
5	247	GGGTGTGGTTAGAATGCACGGTTC	GAACCGTGCATTCTAACCACACCC
	248	GCGAGGACCGAACTAGACAAACGG	CCGTTTGTCTAGTTCGGTCCTCGC
	249	ACGCACGCGTGACCGAAGTTGCTG	CAGCAACTTCGGTCACGCGTGCGT
	250	TAAAAGGTCGCTTTGAAAGGGGGA	TCCCCCTTTCAAAGCGACCTTTTA
	251	TGCGATCGCTAACTGCTGGGACAA	TTGTCCCAGCAGTTAGCGATCGCA
10	252	GGAGGTATAAGCGGAGCGGCCTCA	TGAGGCCGCTCCGCTTATACCTCC
	253	ATGCTGACATGTCGTGCACCTCGT	ACGAGGTGCACGACATGTCAGCAT
	254	TGTGGTTAAAGCGTCCGTTCAACG	CGTTGAACGGACGCTTTAACCACA
	255	CGTTCACACCGGCGTAAGCTGCGT	ACGCAGCTTACGCCGGTGTGAACG
	256	CCTATCCCGGCGAGAACTTCTGTG	CACAGAAGTTCTCGCCGGGATAGG
15	257	GTCTGCACTCACGCAGCGAGGGA	TCCCTCCGCTGCGTGAGTGCAGAC
	258	GCACGAGTTGGTGCTCGGCAGATT	AATCTGCCGAGCACCAACTCGTGC
	259	AACGTCGCACGACACACGTTCGTC	GACGAACGTGTGTCGTGCGACGTT
	260	ATGCGCGCTTATCCTAGCATGGTC	GACCATGCTAGGATAAGCGCGCAT
	261	TCACGTTTTCGTCTCGACATGAGG	CCTCATGTCGAGACGAAAACGTGA
20	262	TGTGCCTCATCCTTAGGATACGGC	GCCGTATCCTAAGGATGAGGCACA
	263	AGGTGGTGTGGGTCAACCGCTTTA	TAAAGCGGTTGACCCACACCACCT
	264	CTGGATCGAAGGGACTGCAAGCTC	GAGCTTGCAGTCCCTTCGATCCAG
	265	TAGATCAACTCGCGTACGCATGGA	TCCATGCGTACGCGAGTTGATCTA
	266	GATCCTGCGGAGAAGAGAGTGCAG	CTGCACTCTCTCTCCGCAGGATC
25	267	TACGTGTGGAGATGCCCCGAACCG	CGGTTCGGGGCATCTCCACACGTA
	268	GCGCTATGTCAATCGTGGGCGTAG	CTACGCCCACGATTGACATAGCGC
	269	AGCGAGGTTTCTAGCGTCGACACC	GGTGTCGACGCTAGAAACCTCGCT
	270	ACCCAGGTTTTGCCGTTGTGGAAT	ATTCCACAACGGCAAAACCTGGGT
	271	CCCTGTTAACGGCTGCGTAGTCTC	GAGACTACGCAGCCGTTAACAGGG
30	272	AGGCCGATTTCACCCGCCAATTGC	GCAATTGGCGGGTGAAATCGGCCT
	273	GAGCCCTCACTCCTTGCCCTTTGA	TCAAAGGGCAAGGAGTGAGGGCTC
	274	GGGTGGACATCCGCCTCGCAGTCA	TGACTGCGAGGCGGATGTCCACCC
	275	GATGGCTGAGAACCGTGCTACGAT	ATCGTAGCACGGTTCTCAGCCATC
	276	TCGACGTTAGGAGTGCTGCCAGAA	TTCTGGCAGCACTCCTAACGTCGA
35	277	CGAATGGGTCTGGACCTTGCATAG	CTATGCAAGGTCCAGACCCATTCG
	. 278	GTGCACCAGACATTCGAACTCGGA	TCCGAGTTCGAATGTCTGGTGCAC
	279	AGAGGCCCGTATATCCCATCCAT	ATGGATGGGATATACGGGGCCTCT
	280	AACGCCTGTTCAGAGCATCAGCGG	CCGCTGATGCTCTGAACAGGCGTT
	281	AAGGCTCAACACGCCTATGTGCGC	GCGCACATAGGCGTGTTGAGCCTT
40	282	AGTCCGTGTTGCCAGATTGGCTCG	CGAGCCAATCTGGCAACACGGACT
	283	ATGTCCCATGTAAAGACGCGTGTG	CACACGCGTCTTTACATGGGACAT

	284	ATGGAGTCTGCTCACGCCCAAAGG	CCTTTGGGCGTGAGCAGACTCCAT
	285	CGGCCTCCAACAAGGAGCACTAAC	GTTAGTGCTCCTTGTTGGAGGCCG
	286	CAGAGCCGTGGCAACATTGCGAGC	GCTCGCAATGTTGCCACGGCTCTG
	287	TCATTTGAATGAGGTGCGCACCGG	CCGGTGCGCACCTCATTCAAATGA
5	288	GACGTACCGGAAGCGCCGTATAAA	TTTATACGGCGCTTCCGGTACGTC
	289	ATGCGAGCAATGGGATCCGGATTC	GAATCCGGATCCCATTGCTCGCAT
	290	AGAGTGAGGCCTCCCTGACCAGTG	CACTGGTCAGGGAGGCCTCACTCT
	291	CGCACCGTAAGTAGATTTGCCCGC	GCGGCAAATCTACTTACGGTGCG
	292	TGAACCTTTGAGCACGTCGTGCGC	GCGCACGACGTGCTCAAAGGTTCA
10	293	TCCGCCTTTTTGGTTACCTCGAAG	CTTCGAGGTAACCAAAAAGGCGGA
	294	GAACGCCAACGGCACTAACACATC	GATGTGTTAGTGCCGTTGGCGTTC
	295 .	CCGACAGCAGCCAAGACGTCCCAG	CTGGGACGTCTTGGCTGCTGTCGG
	296	CATAAAAAACCTGGGGCTCTGCG	CGCAGAGCCCCAGGTTTTTTATG
	297	TGCCAACTGTGCAGACCGGACTTA	TAAGTCCGGTCTGCACAGTTGGCA
15	298	GGCGAAAGAGCGAAACCGGCTCGT	ACGAGCCGGTTTCGCTCTTTCGCC
	299	GGGATGCGTATTTTAGCGAACACG	CGTGTTCGCTAAAATACGCATCCC
	300	TGGGATTCAGCGACCAGTACGCGA	TCGCGTACTGGTCGCTGAATCCCA
	301	CCCGATATTCGCCCGGCCTATTCG	CGAATAGGCCGGGCGAATATCGGG
	302	CGAGAAGATGCCTCACGCAACCAA	TTGGTTGCGTGAGGCATCTTCTCG
20	303	AACCTTGACCCGTGGATGACGCTA	TAGCGTCATCCACGGGTCAAGGTT
	304	GGCTAGACGATGGATACCCGTGCC	GGCACGGGTATCCATCGTCTAGCC
	305	GCCTCTTCTCGACGATGCGATTTT	AAAATCGCATCGTCGAGAAGAGGC
	306	GCTTCCGGATGAACGGGATGGTTG	CAACCATCCCGTTCATCCGGAAGC
	307	CCCTCCATGTTCTTCGAACGGTTT	AAACCGTTCGAAGAACATGGAGGG
25	308	TTGATGGGCGGCAATGCTCTTGCT	AGCAAGAGCATTGCCGCCCATCAA
	309	ATTGTGAGATGCGCCAAATTCCCC	GGGGAATTTGGCGCATCTCACAAT
	310	TCAGCACAGCCAGACGGTCAACTT	AAGTTGACCGTCTGGCTGTGCTGA
	311	ACTCCACTCCTCGGTGGCAAACTA	TAGTTTGCCACCGAGGAGTGGAGT
	312	TCTGGGCATGCCTGGACGGAGACG	CGTCTCCGTCCAGGCATGCCCAGA
30	313	TCTCAACTCCGGTACGACGAAACA	TGTTTCGTCGTACCGGAGTTGAGA
	314	TTGCGTGGTCAAAGGCGCAACGTG	CACGTTGCGCCTTTGACCACGCAA
	315	AGACAGCGATCCGCGGCTCATGAT	ATCATGAGCCGCGGATCGCTGTCT
	316	CGCGTCTCTAACTGAGAGCAGCCA	TGGCTGCTCTCAGTTAGAGACGCG
	317	AGGCGCACATGTACGGACATTCAG	CTGAATGTCCGTACATGTGCGCCT
35	318	GATGAGTGGCACGTCGGTGTGTAA	TTACACACCGACGTGCCACTCATC
	319	TGATCCATATTGTCGGACGTTGCG	CGCAACGTCCGACAATATGGATCA
	320	ACCTGCCGGGAGTTCATAGGCTAG	CTAGCCTATGAACTCCCGGCAGGT
	321	AGCATTGGCGTTTTTCCGCAACGA	TCGTTGCGGAAAAACGCCAATGCT
	322	GGTAATATTCAGCGCGACCGCTCA	TGAGCGGTCGCGCTGAATATTACC
40	323	ATAGCGTACGACGAGGTGACGCGC	GCGCGTCACCTCGTCGTACGCTAT
	324	TAGGTCACGATGCGTTTGACGCTA	TAGCGTCAAACGCATCGTGACCTA

	325	ACTGCCCGTACCTCTGGTTCTGGC	GCCAGAACCAGAGGTACGGGCAGT
	326	CCTTTGGCCTGAAGTTGTCGTAGC	GCTACGACAACTTCAGGCCAAAGG
	327	GTGCCCACGAGCGTATCGTTGTA	TACAACGATACGCTCGTGGGGCAC
	328	AGGCGCTACGTGGGCCTGGAGCAA	TTGCTCCAGGCCCACGTAGCGCCT
5	329	GGGTGCTACCATTGCATTAGTCCG	CGGACTAATGCAATGGTAGCACCC
	330	ACCACGCGCGTACGTGTAACCGAG	CTCGGTTACACGTACGCGCGTGGT
	331	CCATGATGCATTGGGTGCATTTAG	CTAAATGCACCCAATGCATCATGG
	332	GGTCCGGCCCTACGAAACGTTCGA	TCGAACGTTTCGTAGGGCCGGACC
	333	CCGTGTGGCTGGAGATTCGTGTGA	TCACACGAATCTCCAGCCACACGG
10	334	GTTAGGGCGACGCATATTGGCACA	TGTGCCAATATGCGTCGCCCTAAC
	335	GGGTCAGTCAGGTGCGTTAGGATC	GATCCTAACGCACCTGACTGACCC
	336	GCCGTGAAGTCGAATGCAGATCGA	TCGATCTGCATTCGACTTCACGGC
	337	GCCACCACCAGTGCATTCAGGTA	TACCTGAATGCACTGGGTGGTGGC
	338	GAGCTTAGTTTGCGGTCATCGGGC	GCCCGATGACCGCAAACTAAGCTC
15	339	TGTTTGCCGCCATTAGGGAGTAAC	GTTACTCCCTAATGGCGGCAAACA
	340	GCTCCGCTGGATGTGCCGGTTTAG	CTAAACCGGCACATCCAGCGGAGC
	341	CGGTAGCATGCGAGATCCCTGTTA	TAACAGGGATCTCGCATGCTACCG
	342	CTACGCTCTACCAGTTGCCTGCGA	TCGCAGGCAACTGGTAGAGCGTAG
	343	GTGCCTCCTGCTGTATTTGCCAAG	CTTGGCAAATACAGCAGGAGGCAC
20	344	TTGCGACTCGACTTGGACGAGTAG	CTACTCGTCCAAGTCGAGTCGCAA
•	345	TCTGGGAGCTGTTTACTCCAGCCA	TGGCTGGAGTAAACAGCTCCCAGA
	346	TGCACGCGGAACTCCCTTTACCAT	ATGGTAAAGGGAGTTCCGCGTGCA
	347	TGGCAGCAAATGAATCGAAAGCAC	GTGCTTTCGATTCATTTGCTGCCA
	348	AACTGGTGACGCGGTACAGCGAAG	CTTCGCTGTACCGCGTCACCAGTT
25	349	AGACGATTACGCTGGACGCCGTCG	CGACGGCGTCCAGCGTAATCGTCT
	350	ATGCCCTCCTTCATGGAAAGGGTT	AACCCTTTCCATGAAGGAGGGCAT
	351	ATTCTCGGAGCGTATGCGCCAGAA	TTCTGGCGCATACGCTCCGAGAAT
	352	ATAGCGGAGTTTGGGTACGCGAAC	GTTCGCGTACCCAAACTCCGCTAT
	353	ACCTACGCATACCGCTTGGCGAGG	CCTCGCCAAGCGGTATGCGTAGGT
30	354	GATTACCTGAATGGCCAAGCGAGC	GCTCGCTTGGCCATTCAGGTAATC
	355	CCTGTTAGCATCACGGCGCTTAGG	CCTAAGCGCCGTGATGCTAACAGG
	356	CGGAATGATGCGCTCGACAACGCT	AGCGTTGTCGAGCGCATCATTCCG
	357	TGAGAGAGGCGTTGGTTAAGGCAA	TTGCCTTAACCAACGCCTCTCTCA
	358	AAGCAGGCGAAGGGATACTCCTCG	CGAGGAGTATCCCTTCGCCTGCTT
35	359	TCACGACAGACGGGCCGAGATTAC	GTAATCTCGGCCCGTCTGTCGTGA
	360	AAGCAATTTGGCCTCGTTTTGTGA	TCACAAAACGAGGCCAAATTGCTT
	361	GCTGGTTGCGGTAGGATCGCATAT	ATATGCGATCCTACCGCAACCAGC
	362	TTGTGAATCCGTTCTGTCCCCGAC	GTCGGGACAGAACGGATTCACAA
	363	TGGGCTCCTCTGAGGCGAGATGGC	GCCATCTCGCCTCAGAGGAGCCCA
40	364	GGATAGAGTGAATCGACCGGCAAC	GTTGCCGGTCGATTCACTCTATCC
	365	TGCACCGAACGTGCACGAGTAATT	AATTACTCGTGCACGTTCGGTGCA

	366	GCCAGTATTCTCGGGTGTTGGACG	CGTCCAACACCCGAGAATACTGGC
	367	TCGCTACCTAAGACCGGGCCATAC	GTATGGCCCGGTCTTAGGTAGCGA
	368	TGGCATTGACGAGCAGCAGTCAGT	ACTGACTGCTGCTCGTCAATGCCA
	369	CGCGTCCCAGCGCCCTTGGAGTAT	ATACTCCAAGGGCGCTGGGACGCG
5	370	ATGAAGCCTACCGGGCGACTTCGT	ACGAAGTCGCCCGGTAGGCTTCAT
	371	CCAGACAGATGGCCTGGAACCATG	CATGGTTCCAGGCCATCTGTCTGG
	372	TGGCGTGGGACCATCTCAAAGCTA	TAGCTTTGAGATGGTCCCACGCCA
	373	CCGCATGGGAACACGTGTCAAGGT	ACCTTGACACGTGTTCCCATGCGG
	374	GCCCACTCGTCAGCTGGACGTAAT	ATTACGTCCAGCTGACGAGTGGGC
10	375	ATTACGGTCGTGATCCAGAAAGCG	CGCTTTCTGGATCACGACCGTAAT
	376	TGCGAGGTGAGCACCTACGAGAGA	TCTCTCGTAGGTGCTCACCTCGCA
	377	GGGCCGCATTCTTGATGTCCATTC	GAATGGACATCAAGAATGCGGCCC
	378	CCTCGGATGTGGGCTCTCGCCTAG	CTAGGCGAGAGCCCACATCCGAGG
•	379	TAGGCATGTTGGCGTGAGCGCTAT	ATAGCGCTCACGCCAACATGCCTA
15	380	CGATACGAACGAGGATGTCCGCCT	AGGCGGACATCCTCGTTCGTATCG
	381	TACGCCGGTTAGCACGGTGCGCTA	TAGCGCACCGTGCTAACCGGCGTA
	382	CATACGATGTCCGGGCCGTGTCGC	GCGACACGGCCCGGACATCGTATG
	383	ATCCGCAGTTGTATGGCGCGTTAT	ATAACGCGCCATACAACTGCGGAT
	384	GGGTAAGGGACAAAGATGGGATGG	CCATCCCATCTTTGTCCCTTACCC
20	385	ATTGGAGTGTTTTGGTGAATCCGC	GCGGATTCACCAAAACACTCCAAT
	386	GAACCGAGCCAACGTATGGACACG	CGTGTCCATACGTTGGCTCGGTTC
	387	GCCGTCAAGCTTAAGGTTTTGGGC	GCCCAAAACCTTAAGCTTGACGGC
	388	ACCTGCTTTTGGGTGGGTGATATG	CATATCACCCACCCAAAAGCAGGT
	389	AATCGTGGGCGCAGCAAACGTATA	TATACGTTTGCTGCGCCCACGATT
25	390	GTCGCCGGATTGCTCAGTATAAGC	GCTTATACTGAGCAATCCGGCGAC
	391	ACCCGTCGATGCTTCCTCCTCAGA	TCTGAGGAGGAAGCATCGACGGGT
	392	ATCCGGGTGGGCGATACAAGAGAT	ATCTCTTGTATCGCCCACCCGGAT
	393	TTCCGCATGAGTCAGCTTTGAAAA	TTTTCAAAGCTGACTCATGCGGAA
	394	GCAAAGTCCCACTGGCAAGCCGAT	ATCGGCTTGCCAGTGGGACTTTGC
30	395	CGACCTCGGCTTCATCGTACACAT	ATGTGTACGATGAAGCCGAGGTCG
	396	CTCATGAGCGCAGTTGTGCGTGAG	CTCACGCACAACTGCGCTCATGAG
	397	CAGATGAAGGATCCACGGCCGGAG	CTCCGGCCGTGGATCCTTCATCTG
	398	TCAAAGGCTCTTGGATACAGCCGT	ACGGCTGTATCCAAGAGCCTTTGA
	399	TCCGCTAATTTCCAATCAGGGCTC	GAGCCCTGATTGGAAATTAGCGGA
35	400	ACGCACGCCCTTTTGCCTTAATG	CATTAAGGCAAAAGCGCCGTGCGT
	401	TGACAACGTCACAAGGAGCAGGAC	GTCCTGCTCCTTGTGACGTTGTCA
	402	CTTAGTTGGGGCGCGGTATCCAGA	TCTGGATACCGCGCCCCAACTAAG
	403	GCTCTAATGCCGTGGAGTCGGAAC	GTTCCGACTCCACGGCATTAGAGC
	404	CCGATTACAAATTGACTGACCGCA	TGCGGTCAGTCAATTTGTAATCGG
40	405	AGACGTACGTGAGCCTCCCGTGTC	GACACGGGAGGCTCACGTACGTCT
	406	AATGGAGCGATACGATCCAACGCA	TGCGTTGGATCGTATCGCTCCATT

407 GGAGGCGCTGTACTGATAGGCGTA TACGCCTATCAGTACAGCGCCTCC 408 TGTTITITGAATTGACCACACGGGA TCCCGTGTGGTCAATTCAAAAACA 409 CATGTCTGGATGCGCCTCAATGAAG CTTCATTGAGCGCATCCAAAAACA 410 GCCCGCTAATCCGACACCCAGTTT AAACTGGGTTCAGTTAGCGGGC 411 CCATTGACAGGAGAGCCATGAGCC GGCTCATGGCTCTCCTGTCAATGG 412 GAATCACCGAACCACCAGTTT AAACTGGGTGTCATTCGGTATTC 413 AACCAGCCGCAGTAGCTTCAGTCG CGACGTAAGCTACTCCGGCTGTATTC 414 TTTTCTGAGGGACACCGGGGCGTT AACGACTCACTCCCGGCTGGTT 414 TTTTTCTGAGGACACACCGACCTCGTT AACGACTCACTCCCGGCTGGTT 415 GGTGCTCCGTTTGATCGTCC CGACGTAACCTACCCGGCTGGTT 416 CCGCTTTAGACCACACCCACTCGCT AGCCCACTCACACACACACACACACACACACACACACACA				
409 CATGTCTGGATGCGCTCAATGAAG CTTCATTGAGCGCATCCAGACATG 410 GCCCGCTAATCCGACACCCCASTTT AAACTGGGTGTCGGATTAGCGGGC 411 CCATTGACAGGAGAGCCATGAGCC GGCTCATGGCTCTCCTGTCAATGG 412 GAATCACCGAATCACCGACTCGTT AACGAGTCGGTGATTCGGTGATTC 413 AACCAGCCGCAGTAGCTTAGATCGTCG CGACGTAAGCTACTCGGTGATTC 414 TTTTCTGAGGGACACCGGGCGTT AACGACCGAGTCCCTCAGAAAA 415 GGTGCTCCGTTTGATCGATCCTCC GGAGGATCGATCAACGGAGCACC 416 CCGCTTAGGCCATACTCTCCC GGAGGATCGATCAAACGGAGCACC 417 TAAGACATACCGAACGCAGCCCTTGCCT AGGCAAGGGCGTCGGTATGTCTTA 418 GTTCCCGACGCCCAGTCATTGAGAC TGCTCAAGAGTATGGCCTAACCGG 419 TAAAAGTTTCGCGGAGGCCTTGCCT AGGCAACTCAGCCGGAAC 419 TAAAAGTTTCGCGGAGGCCTTACAA TTTAAGTCCGTCGCGAACCTTTA 420 CGGTCCAGACGACGCTAACATTCAAAA TTTAAGTCCGTAGCCGAACCTACCAGC 421 CGGCGTAGCGGCTACAGCAGA TCCTCCGCGAAACTTTTA 420 CGGTCCAGACGAGCTAAAA TTTTAAGTCCGTAGCCGCATCCCCCCAAACCTACCAGC 422 GCTTGGATGCCCATGCAGAAA TTTTCGCCGATGGCCGATCCCCCCT 425 GCATTGAGAGCGCAGTATAAA TTTTAAGTCCGTAGCCGCATCCACCCC 426 GACCTTGAAGAGCGACGAGTTCAAAA TTTTCGAAACTCTGGGATCCCGCT 427 ACCCGACACCCACATTCAAAAA TTTTTCGAAACTCTGGCGTCCAGCTC 428 GCATAGCGCTGCACGTTTCGACCCG GCGGTCCAAACCCCAATC 429 CCGCCGACACCCACATTCAAAAA TTTTTGAAACCTGGCGCTATGCC 429 CCGCCGACTGTAAGAGAGCCCCCAA TCCAACCCCACTCTCCAAGCTC 429 CCGCCGACTGTAAGAACCCCCAATTCCAAAAA TTTTTTGAAACCTGGCGCTATGC 429 CCGCCGACGACGCCTTCCAACACCCACATTCCAAAAA TTTTTTGAAACCTGGCGCTTTCAACCCGC 429 CCGCCGACGACGCCTAAGACACCCACATTCAAAAA TTTTTTGAAACCTGGCGCTATGC 429 CCGCCGACGACGCCTG CAGGGCCTTCAAACCGCCGATGCC 429 CCGCCGACGACACCACAATTCAAAAA TTTTTTGAAACCTGGCGCTATGCCCACGACGCCTTACACCCGA TCCAGATCCCCGATTCCCCGATTCCCCAATCCCAATCCCAACCCAATTCAAAAAA TTTTTTCAAACCTTCGGCGGAACACCACAATTCAAAAA TTTTTTAATCGTTTTCCGCCTTCCAACCCACACCACA		407	GGAGGCGCTGTACTGATAGGCGTA	TACGCCTATCAGTACAGCGCCTCC
410 GCCCGCTAATCCGACACCCAGTTT AAACTGGGTGTCGGATTAGCGGG 411 CCATTGACAGGAGAGCCACAGCC 412 GAATCACCGAATCACCGACCCGTT AACGAGTCGGTGATTCGGTGATTC 413 AACCAGCCGCAGTAGCTTACGTCG 414 TTTTCTGAGGGACACCGGGGCGTT AACGAGTCGGTGATTCCGTCAGAAA 415 GGTGCTCCGTTTGATCGTCC 416 CCGCTTAGGCCACTAGCTCTCC GGAGGATCAACCGAGCCCTGGCTT AACGCCGCGTGTCCTCCAGAAAA 416 CCGCTTAGGCCAATCTCTCAGCCA 417 TAAGACATACCGACCCCTTGCCT 418 GTTCCCCGACGCCCTTGCCT 419 TAAAAGTTTCGCGGCACTCGTCATGCTCAGCAGAAAA 419 TAAAAGTTTCGCGGAGCACTTGCCT 420 CGGTCCAGACGAGCTGATTGAGCA 419 TAAAAGTTTCGCGGAGGCACTTGCT 421 CGGCGTAGGCGAGTTAGAGAC 422 GCTTGGATGCCGAACGAGCTTAAA 423 AGCGGGATCCCAACGAGCTTAAA 424 GAGCTTGAAGCCAAACGACCTTCAGCCAGAAAA 425 GCATGGCCGTTTCGAAAA 426 GCATGGCCGTTTTGAAAAA 427 GAGCTTGAGAGCAAAA 428 GCATAGCCCATGCGGCAAGGT 429 GCATGGCCGTTTTGAACAA 420 GAGCTTGAGAGCAAAA 421 GAGCTTGAGAGCAAAA 422 GCATGGCCGTTTTGAAAAA 423 AGCGGGATCCCAGAGGTAAAA 424 GAGCTTGAGAGCAAAAA 425 GCATAGCCCATTCCAAAAA 426 GCATAGCCCGTTTTGAAAAAA 427 ACCCGACACACCAATTCAAAAA 428 GCAAACGCCGATTTCCACACA 429 GCATAGCGCCGTTTTGACCCTC 426 CATAGCGCTGCACGTTTCCACACC 427 ACCCGACACACCACCAATTCAAAAA 428 GCGAAACATCAATAAAAA 429 CCGCCGAACTTAGAAAAA 411TTTTGAATTGGTGGTTGCGGCT 429 CCGCCGGAGTGTAGAGAACATCCGA 429 CCGCCGAACTAGAACAACACCACCAATTCAAAAA 420 CGGCCGAACTCATAAAAAAAAAAAAAAAAAAAAAAAAAA		408	TGTTTTTGAATTGACCACACGGGA	TCCCGTGTGGTCAATTCAAAAACA
411 CCATTGACAGGAGAGCCATGAGCC 412 GAATCACCGAATCACCGACTCGTT 413 AACCAGCCGCACTAGCTTACCTGTC 414 TTTTCTGAGGGACACCGGGGCGTT 414 TTTTCTGAGGGACACGCGGGCGTT 415 GGTGCTCCGTTTGATCCAGCCACTCGTC 416 GGTGCTCCGTTTGATCCATCCCCGCCGCGTTCCCTCAGAAAA 416 GGTGCTCCGTTTGATCCATCCTC 417 TAAGACATACCGACGCCCCTTGCCT 418 GTTCCCGACGCCCATCATTCAGACC 419 TAAAAGTTTCGGAGCA 419 TAAAAGTTTCGGAGCA 419 TAAAAGTTTCGGAGCA 411 TAAAAGTTTCGGAGCA 411 TAAAAGTTTCGCGAGGCCATCATTCAGAC 412 CGGCCACACCCAGTCATTCAGAC 413 AACCCCAGCCCAGTCATTCAGAC 414 TTTAAAAGTTTCGCGGAGGTCGGGCT 415 ACCCCGACCCCAGTCATTCAGAC 416 CCGCTCAGACGCCCAGTCATTCAGAC 417 TAAAAGTTTCGCGGAGGTCGGGCT 418 GTTCCCGACGCCAGTCATTCAGAC 419 TAAAAGTTTCGCGGAGGTCGGGCT 420 CGGTCCAGACGACCTAGAAC 421 CGGCGTACGGAGTTCGGC 422 GCTTGGATGCCCATGCAGACTTAAA 422 GCTTGGATGCCCATGCAGACTTAAA 423 AGCGGATCCCAGAGTTTCGAAAA 424 GAGCTTGAGCCGAAATTTCGAAAA 425 GCATCGCGCGTTTTTGACCATTTTC 426 GAGTTGAGCCGATGCTCCC 427 ACCCGACAACCACCATTTCAAAAA 427 ACCCGACAACCACCATTTCAAAAA 428 GCAAACACTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA		409	CATGTCTGGATGCGCTCAATGAAG	CTTCATTGAGCGCATCCAGACATG
412 GAATCACCGAATCACCGACTCGTT AACGAGTCGGTGATTCGGTGATTC 413 AACCAGCCGCAGTAGCTTACGTCG CGACGTAGCTACTCGCGCTGGTT 414 TITTCTGAGGGACCGCGGGGGTT AACGCCCGCGTGTCCCTCAGAAAA 415 GGTGCTCGTTGATCGATCCTC GGAGGATCGACAACGGAGCCC 10 416 CCGCTTAGGCCATACTCTGAGCCA TGGCTCAGAGCTAAGCGGG 417 TAAGACATACCGACGCCCTTGCCT AGGCAGAGGATCGACTAAGCGG 417 TAAGACATACCGACGCCCTTGCCT AGGCAAGGGCGTCGGTATGTCTTA 418 GTTCCCGACGCCAGTCATTGAGAC GTCTCAATGACTGGCGTAGCTGAA 419 TAAAAGTTTCGCGGAGGTCGGGCT AGCCGAACCTACGCGGAAACTTTTA 420 CGGTCCAGACGAGCTGAGTTCGGC 421 CGGCGTACGGACTACGACTTAAA 1TTAAGTCCGTAGGCCAACCG 422 GCTTGGATGCCCATGCGCAAGGT ACCTTCAGTCCGCCAACCG 423 AGCGGATCCCAGAGTTTCGAAAA 1TTTCGCGAACCACCGC 424 GAGCTTGAGACGAGGT ACCTTCCAGCCT 425 GCATCGCCCGTTTTGACCCT 426 CATAGCCCGTTTTGACCATATTC 427 ACCCGACACCACCATTCAAAA 1TTTCGAAACTCTGGGCATCCGCT 427 ACCCGACAACCACCATTCAAAAA 1TTTTGAATTGGTGGTTGTCGGGT 428 GCGAACACCACCAATTCAAAAA 1TTTTGAATTGGTGGTTGTCGGGT 429 CCGCCGACACCCACATTCAAAAA 1TTTTGAATTGGTGGTTGTCGGGT 429 CCGCCGACAACCATCCAATAA 1TTTTGAATTGGTGGTTTCGGGT 429 CCGCCGACAACCACCACATTCAAAAA 1TTTTGAATTGGTGGTTTGCGGT 429 CCGCCGACAACCACCACATTCAAAAA 1TTTTGAATTGGTGGTTTCGCGGT 429 CCGCCGACAACCACCACATTCAAAAA 1TTTTGAATTTGGTGGTTTCGCGT 429 CCGCCGAACCATGAG 430 GACATCGGCAACATCACATAA 431 TCGTGTAAACACGCCCCT CAGGGGCCCTTTATACACTCGGCGA 432 ATGCGCATAACTCACCACGACCACCACCACTACAC 433 ACAAGCGAACCCACAATTCAATAA 434 ACAAGCGAACCCCGAACATGAG 435 TCCTACATGTCGCCAAGGCCT 436 GACCGAACACTCACACT 437 GTCCCACAACCCCACGACCACGC 438 ACAAGCGAACCCACACACCACTACAC 439 TCCTACAATGCGCCAAGGCCT 431 TCGTGAACCTCGCCAAGCCCTACC 433 ACAAGCGAACCCCGAACATGAC 434 ACAACCAACACCACCACATTCAACACT 435 TCCTACATGTCGCCAAGCCCTACC 436 GACCGAACCTCCGCCAGGCCCTCCGCAGCTCCTGCCCAATGCC 437 GTCCCCAGACCTACCACT 438 ACAAGCGAACCCGACGACCACCACCACCACCACCACCACC		410	GCCCGCTAATCCGACACCCAGTTT	AAACTGGGTGTCGGATTAGCGGGC
413 AACCAGCCGCAGTAGCTTACGTCG 414 TTTTCTGAGGGACACGCGGGCGTT 415 GGTGCTCCGTTTGATCGATCCTCC GGAGGATCGATCAACAGCAGCACC 416 CCGCTTAGGCCATACTCTGAGCCA TGGCTCAGAGATAACGGAGCACC 417 TAAGACATACCGACGCCCTTGCCT AGGCAAGAGCACCCTGCCGATACCAGAGACACCCTGAGCCA TGGCTCAGAGATATGGCCTAAGCGGACCCTTGCCT AGGCAAGGGCGTCGGTATGTCTTA 418 GTTCCCGACGCCAGTCATTGAGAC GTCTCAATGACTGGCGTATGTCTTA 419 TAAAAGTTTCGCGGAGGTCGGGCT AGCCCGACCTCCGCGAAACTTTTA 420 CGGTCAGACGAGGTCGGGCT AGCCCGACCTCAGCCCGGAACCTTTTA 421 CGGCGTAGCGGCTACGGCCTTAAAA 422 GCTTGGATCCCAGAGGTTAGAAA TTTTAGACCGCTAGCCGCG 422 GCTTGGATCCCAGAGGTTCGGC GCCGAACCTCAGCCCGCACCCCACGCCGCACCCACGCCGCACCAGCCCAAGCCCAAGCCAAGCCAAGCACACACCAC	5	411	CCATTGACAGGAGAGCCATGAGCC	GGCTCATGGCTCTCCTGTCAATGG
414 TITITCTGAGGGACACGCGGGCGTT 415 GGTGCTCCGTTTGATCGATCCTCC GGAGGATCGATCAAACGGAGCACC 416 CCGCTTAGGCCATACTCTGAGCCA 417 TAAGACATACCGACGCCCTTGCCT GGCTCAGAGGTATGGCTAAGCGA 418 GTTCCCGACGCCCTTGCCT 418 GTTCCCGACGCCCTTGCCT 419 TAAAAGTTTCGCGGAGGCTCGGGCT 420 CGGTCCAGACGACGCCTTGCCT 421 CAGCCAGCACCTCCGCGAAACTTTTAA 420 CGGTCCAGACGACGCTTCGGC 421 CGGCTAGACGACGCTCAGCGCT 422 GCTTGGATGCGCAAGCTTCAGCCA 422 GCTTGGATGCGCAGCATTAAA 423 AGCGGGATCCCAGAGTTTCGAAA 424 GAGCTTGAGACCCCAGCATTTCAAAAA 425 GCATCGGCCAGCATTTCAAAAAAAAAAAAAAAAAAAAAA		412	GAATCACCGAATCACCGACTCGTT	AACGAGTCGGTGATTC
415 GGTGCTCCGTTTGATCGATCCTCC GGAGGATCGATCAAACGGAGGCACC 416 CCGCTTAGGCCAATCCTGAGCCA 417 TAAGACATACCGACGCCCTTGCCT 418 GTTCCCGACGCCCCTTGCCT 419 TAAAAGTTTCGCGAGGTCTGGGCT 419 TAAAAGTTTCGCGAGGTCTGGGCT 420 CGGTCCAAGACGAGGCCCTTGCGCT 421 CGGCTAGCGGAGGTCGGGCT 422 GCTTGATGCCCATCGGAGTTGAGAC 423 AGCGGGTAGCGCGTAGGTTGGGC 424 GAGCTTGAGACAGTGAGTTCGGACAG 425 GCTTGGATGCCCAGAGGTTAAA 426 GCATCGGCCGAAGGTTCAAAA 427 ACCGGATCCCAGAGTTTCGAAAA 427 ACCCGACCCTCCGCGAAACCTCCTCCAGAGCTC 428 GCATCGGCCGTTTTTTTTCGACACAC 429 GCATCGGCCGTTTTTTTTTTTTTTTTTTTTTTTTTTTTT		413	AACCAGCCGCAGTAGCTTACGTCG	CGACGTAAGCTACTGCGGCTGGTT
10 416 CCGCTTAGGCCATACTCTGAGCCA TGGCTCAGAGTATGGCCTAAGCGG 417 TAAGACATACCGACGCCCTTGCCT AGGCAAGGCGTCGGTATGTCTTA 418 GTTCCCGACGCCAGTCATTGAGAC GTCTCAATGACTGGCGTCGGGAAC 419 TAAAAGTTTCGCGGAGGTCGGGCT AGCCCGACCTCGCCGAAACTTTTA 420 CGGTCAGACGAGCTGAGTTCGGC GCCGAACTCAGCCCG 421 CGGCGTAGCGGCTACGGACTTAAA TTTAAGTCCGTAGCCCGCCAAGCTCAGCCCG 422 GCTTGGATGCCCATGCGGCAAGGT ACCTTGCCGCATGGGCATCCAGCCG 423 AGCGGGATCCCAGAGTTTCGAAAA TTTTCGCAGACTCTGGGCACGC 424 GAGCTTGAGAGCGCATTCCAAAA TTTTCGAAACCTCTGGGCACCC 425 GCATCGGCCGTTTTGACCATC GAGATTACAACCTCTGCGCAACCTCCTCAAGCTC 426 CATACCGCTGCACGTTTCGACCGC GCGGTCGAAACCTGCAGCCCTTACACCCC 427 ACCCGACACACCACAATTC GAATATTGGTGTAAAACGGCCGATCC 428 GCGAACACCCCAATTCAAAA TTTTTGAATTGGTGGTTCGGGCAACCACACACTATTC 428 GCGAACACCCCAATTCAAAA TTTTTGAATTGGTGTTTCGGGT 429 CCGCCGAGTGTAGAGAGACCCCGA TTTTGAATCACACTCGGCGCGATCC 429 CCGCCGAGTGTAGAGAGACCCCGA TTTTGAATCACACTCGGCGCGATCC 429 CCGCCGAGTGTAGAGAGACATCGA CTCATGTTTCCGGCTCCCGATGTC 429 CCGCCGAGTGTAGAGAGACACCGA 430 GACATCGGGAACCACAATTACAAAA TTTTTTCAATTTGAATTTGCGCGT 431 TCGTGTAGACTCGGCGAAACATGAG CTCATGTTTCCGGCTCCCGATGTC 432 ATGCGCAATACTGACGCGCAACACGCGT ACGCCTTTCTACACCTCGGCGG 433 ACAACCGAACCCGAATTTTGATGA CTCACGGACTCTCACACGA 434 ATGCGCAATACTGACTGCGCAAG 435 TCCTACATGTCGCGCAAGCACTGA ACATGTTCCGGGATCACTTCATGC 436 GACCGATCCGCGAAGACATGT ACATTTTCGCGGACTCACTGGGAACCATGAAGACTTCACCACA ATGTTCACGCGAACATGAAGACTTCACCACA ATGTTCACGCGAACATGTAGGA 436 GACCGATCAGCGAACATGTA ACATGTCTCGCGAACCATGTAGGA 437 GTCGCCAGGAACTCGTCCACACA ATGTTCACCGGACCACTCATGCGAACATGTAACAAT ATGTGTACGACTTCAGCGTAACAAT ATGTGTACGACTTCAGCGTACACAT ATGTGTACGACTTCAGCGAACTCACTGAACAAT ATGTGTACGACTTCAGCGAACATGTAACAAT ATGTGTACGACTTCAGCGAACATGTATGGAACATTAACCAGTTCCGCAAACCAGACTATTTAACCAGCCCCAAGACCAGATTCAACAAT ATGTGTACGACTTCAGCAACCAATTAACCAGTCCGAAACCAGACTATTAACCAGCCCCAAGCCGAACACGAATTCAACAAT AAGTGTACGACATTCAACAAT AAGTGTACGACCCCAAGCCGAACACGAATTACGACCCCAAGCCCAACCAA		414	TTTTCTGAGGGACACGCGGGCGTT	AACGCCCGCGTGTCCCTCAGAAAA
417 TAAGACATACCGACGCCTTGCCT AGGCAAGGCGTCGGTATGTCTTA 418 GTTCCCGACGCCAGTCATTGAGAC GTCTCAATGACTGCGTCGGGAAC 419 TAAAAGTTTCGCGGAGGTCGGGCT AGCCCGACCTCCGCGAAACTTTTA 420 CGGTCCAGACGAGCTGAGTTCGGC GCCGACTCAGCTCGTCTGGACCG 421 CGGCGTAGCGGCTACCGGACTTAAA TTTAAGTCCGTACGCCG 422 GCTTGGATGCCCATGCGGACAGTT ACCTTGCCGCATGGGCATCCAAGC 423 AGCGGGATCCCAGAGTTTCGAAAA TTTTCGAAACTCTGGGATCCGCT 424 GAGCTTGAGAGCGAGGTCATCCT GAGATGACCTCGCCT 425 GCATCGGCCGTTTTGACCATCT GAATATTGTCAAACCGCCGTTCAAGCT 426 CATAGCGCTGTCCACGTTTCGACCG GCGGTCGAAACGTCCAGCCT 427 ACCCGACAACCACCATTTCAAAAA TTTTTGAAAACTGCGCGCTAG 428 GCGAACACCACCAATTCAAAAA TTTTTGAATTGGTGTTGCGGCTAG 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGTGTTTCGAGCTC 428 GCGAACAACCACCAATTCAAAAA TTTTTTGAATTGGTGTTTCCGGT 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGTCTTACACTCGGCGT 429 ACCCGACAACCACCAATTCAAAAA TTTTTCAATTTGGTGTTTTCCGGT 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGTCTTCTACACTCGGCGG 430 GACATCGGGAACACTGAG CTCCATGTTTCCGGCTCCCGATGTC 431 TCGTGTAGACTCCGCGAAACATGAG CTCCATGTTTCCGGCTCCCGATGTC 432 ATGCGCATATACTGACTGCGCAAG 433 ACAAGCGAACCCGAGTTTTGATGA 434 GCATGAGACTCCGCAAGCACT ACCCTGTCCGCAGTCTACACCGA 435 TCCTCACATGCGCAAGACATGT ACACTGTCGCGAACTTCATGC 436 GACCGACCCGGAACACTGT ACACTGTCGCGAACTCATGGA 437 GTCGCCAGAACTCGCGCAACAC GTGTACACCGGAACTTCACGGA 438 ACCGATCAGCGGAACTCGTACAC GTGATCACGGACATTGAGGA 439 TCCATCACTGCGCAAGTCAC GTGATCACGGACATTGAGGA 439 TCCATCACGGCACATCGAC CGTTCCGGAACTTCGCGACTCTGGCGAC 439 ACCGATCAGGACTCGGACCCGG CCGGCACTTCGGCACTCTGGCGAC 439 TCCATCACCGGAAGTCCCG CGGCACTTCGGCACTGGGTC 439 TCCATCACCGGAAGTCCCGACG CGGCCCACTCCTGGCGAC 439 ACCGATCAGCGCACTCCTGAACCC GTTCCGGACTCAGGTC 439 ACCGCATCACTCCGAAGTCCC GGGCACTTCGGCACTGGTTATGGA 440 ACGCCCCTGCATCTCCGTATTTAA TTAAATACCAGATTCACGGTC 431 AGACCGCCTGCATCTCCGTATTTAA TTAAATACCAGATTCCAGCCCTCCAACCC CGGCACTTCCGCAACCCGCTTCCTAACCCAGCCTCCTAACCCGCCAACACCACACCCCTTTCCCAACCC 441 AGACCGCCTGCATCTCCCTAATTGCCCGCCCCCAGCCCAACCACACCACACCACTATGCCCAC 442 AGAGCTTGGCAAGTAGGGCCCT AGGGCCCTACCCGCACACCCGACTTCCCAACCC 444 AGACCGCCTCAATTGCGTCCCCT AGGGACCCTACCCGCACACCACCACCACCACCACCACCACCACCACCAC		415	GGTGCTCCGTTTGATCGATCCTCC	GGAGGATCGATCAAACGGAGCACC
418 GTTCCCGACGCCAGTCATTGAGAC GTCTCAATGACTGGCGTCGGGAAC 419 TAAAAGTTTCGCGGAGGTCGGCT AGCCCGACCTCCGCGAAACTTTTA 420 CGGTCCAGACGACGAGTTCGGC GCCGAACTCAGCTCGTCTGGACCG 421 CGGCGTAGCGGCTACGGACTTAAA TTTAAGTCCGTAGCCGCTACGCCG 422 GCTTGGATGCCCATGCGGCAAGGT ACCTTGCCGCATGGCCATCCAGCC 423 AGCGGGATCCCAGAGTTCGAAAA TTTTCGCACACTCTGGGACTCCAGCC 424 GAGCTTGAGAGCGAGGTCATCCTC GAGGATCACCTCTCCAAGCC 425 GCATCGGCCGTTTTGACCATATTC GAATATGGTCAAAAACGCCCGATGC 426 CATAGCGCTGCACGTTTCGACCGC GCGGTCGAAACGGCCGATGC 427 ACCCGACAACCACCAATTCAAAAA TTTTTGAATTGGTGTGTCGCGT 428 GCGAACACTCATAAGAGCGCCCTG CAGGGCGCTTTATGAGTGTTCGC 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGTCTCTCACCTG 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGTCTCTCACCTCGGCGG 430 GACATCGGGAGCCGGAAACATGAG CTCATGTTTCCGGCTCCCGATGTC 25 431 TCGTGTAGACTCGCGACGGCGT ACGCCTGTCCCCGATCTC 432 ATGCGCATATACTGACTGCGCAGG CCTGCCCGAGTCTACACGA 433 ACAAGCGAACCCCAATTGATGA TCATCAAAACTCGGCTGCTTGT 434 GCATGAGACTCCGCGAAGACATGT ACATCTTCTCGCGCTCCCGATCTC 435 TCCTACATGTCGCCGAACACATGT ACATCTTCTCGCGAGTCTCATGC 436 GACCGATCACCGAAGACATGT ACATCTTCGCGAGTCTCATGC 437 GTCGCCAGGACTCACGATCAC GTGATCATCACGA 438 ACCGATCACGGAACACATGT ACATCTTCGCGAACCACTCATGAC 439 TCCTACATGTCGCCGAACGCCT ATGTCTCGCGAACCATCTTACGG 438 ACCGATAACCAGTCCGCAACGCCATCAC ATGTTCTCGCGATCCTTATCGGT 439 TCCATAACCAGTCCGAACGCCCCAACACCACTCACGAACACTCGGCCCAATCTTACGGT 439 TCCATCAACCAGTCCGAACGCCCCAAGTCCTGGAACACTCTTTACGGT 439 TCCATCAACCAGTCCCGAACGCCCCAAGTCCTGGAACACTCTTATCGGT 439 TCCATCAACCAGTCCCGAACGCCCCAAGTCCTGGAACACTCTTATCGGT 439 TCCATCAACCAGTCCCGAACGCCCCAAGTCCTGGAACACGCCCCAATTTACGGT 431 AGACCGCCTGCATCTATTTAA TTAAATACGAGATGCAGGCCCTTATCGAACGCCCAATTGACCGGCCCAATTTACGGT 442 AGAGGCTTGCAAGTACCGG CCGGTACCTACTTGCCAACGCCCAATTGACGGCCCAATTGACACTCTTATCGCGAACGACTAACTCCGGCAACACGACTAACTCCAGCCCAATTGACCGCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGCCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGGCCCAATTGACCGCCCAACCACCACCACCACCACCACCACCACCACCA	10	416	CCGCTTAGGCCATACTCTGAGCCA	TGGCTCAGAGTATGGCCTAAGCGG
419 TAAAAGTTTCGCGGAGGTCGGCCT AGCCCGACCTCCGCGAAACTTTTA 420 CGGTCCAGACGACTGAGTTCGGC GCCGAACTCAGCTCGTCTGGACCG 421 CGGCGTAGCGGCTACGGACTTAAA TTTAAGTCCGTAGCCGCTCGTCTGGACCG 422 GCTTGGATGCCCATGCGGCAAGGT ACCTTGCCGCATGGCCATCCAGCC 423 AGCGGGATCCCAGAGTTTCGAAAA TTTTCGAAACTCTGGGATCCCGCT 424 GAGCTTGACAGCAGGTATCCTC GAGGATGACCTCGCTCTCAAGCTC 425 GCATCGGCCGTTTTGACCATATTC GAATATGGTCAAACGGCCGATGC 426 CATAGCGCTGCACCGTTTCGACCGC GCGGTCGAAACGTGCAGCCTATTG 427 ACCCGACAACCACCAATTCAAAAA TTTTGAATTGGTGGTTGTCGGGT 428 GCGAACACCACCAATTCAAAA TTTTTGAATTGGTGGTTGTCGGGT 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGCCTTATAGAGTGTCCGC 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGCTCTTATCACTCGGCGG 430 GACATCGGGAGCCGGAAACATGAG CTCATGTTTCCGCCTCCCGATGTC 431 TCGTGTAGACTCGGCGAACACTGAG CCTCATGTTTCCGCCGGG 432 ATGCGCATATACTGACTGCGCAG CCTGCCCAGTCTCACCGA 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCCGCGAAGACATGT ACATGTCTTCGCGGAGTCTAACCGA 435 TCCTACATGTCGCCGAAGACATGT ACATGTCTTCGCGGAGTCTATGC 436 GACCGATCGCGCAAGACATGT ACATGTCTTCGCGGAGTCTATGC 437 GTCGCCAGGAGTCACACAT ATGTGTACGACTCAGGAC 438 ACCGATCGCGAAGACATGT ACATGTCTTCGCGAACCACTCATGC 439 TCCATAACCAGTCCGAAGTCAC TACACATCGGCCCAATTTACGGA 439 TCCATAACCAGTCCGAAGTCAC CGTTCGGACCCCAGTCTTACCGGT 439 TCCATAACCAGTCCGAAGTCAC CGTTCGGAAGCTTATCGGA 439 TCCATAACCAGTCCGAAGTCAC CGTTCGGATCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCG CCGGCACTTCGGACTGTTATGGA 440 ACGCGCCTTGCATCTTCGTATTTAA TTAAATACGAATTCAGAGCTTTATCGGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCCCAATTGATGAGACTTAACGAATTGGCGATCCTTTTAA TTAAATACGAATTGATGAGGCCCTT 442 AGAGGCTTCGATCTTCGTATTTAA TTAAATACGAATTCAGAGCCCCATTCGCATCCTT 443 GCAATGACCTCAATTGGCGCGTACC GGTACCCAATTGATGAGCCCCATTCGCAAGTCCTT 444 AGACCGCATCAATTGGCGCGTACC GGTACCCCACTTCGCAAGCCCCTCT 444 AGACCGCATCAATTGGCGCGTACC GGTACCCCACTTCGCAAGCCCCTCT 444 AGACCGCATCAATTGGCGCGTACC AGGGCCCAATTGATCCAGCCATCATTGCCAAGCCCCATTCGCAAGCCCCAATTGATCCGCCAACACGACTAACTCCAGCCATCCAT		417	TAAGACATACCGACGCCCTTGCCT	AGGCAAGGCCGTCGGTATGTCTTA
420 CGGTCCAGACGAGCTGAGTTCGGC GCCGAACTCAGCTCGTCTGGACCG 421 CGGCGTAGCGGCTACGGACTTAAA TITTAAGTCCGTAGCCGCTACGCCG 422 GCTTGGATGCCCATGCGGCAAGGT ACCTTGCCGATGGCATCCAGCC 423 AGCGGGATCCCAGAGTTTCGAAAA TITTCGAAACTCTGGGATCCCGCT 424 GAGCTTGAGAGCGAGGTCATCCTC GAGGATGACCTCGCTCTCAAGCTC 425 GCATCGGCCGTTTTGACCATATTC GAATATGGTCAAAACGGCCGATGC 426 CATAGCGCTGCACGTTTCGACCGC GCGGTCGAAACGTGCAGCGCTATG 427 ACCCGAACCACCACATTCAAAAA TITTTGAATTGGTGGTTTCGGGGT 428 GCGAACCACCAATTCAAAAA TITTTGAATTGGTGGTTTCGGGT 429 CCGCCGAGTGTAGAGCGCCCTG CAGGGCGCTCTTATGAGTGTTCGC 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGTCCTCTACACCTCGGCGG 430 GACATCGGGAGCCGGAAACATGAA CTCATTTTCCGGCTCCCGATGTC 25 431 TCGTGTAGACTCGGCAGCGCT ACGCCTGTCGCCGAGTCTACACCA 432 ATGCGCATATACTGACTGGCAGG CCTGCCGAGTCACACCAC 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCCGCAAGACATGT ACATGTCTTCGCGGAGTCTCATGC 435 TCCTACATGTCGCGTCACGATCAC GTGATCCTCGCGGAGTCTCATGC 436 GACCGATCGCGAAGACATGT ACATGTCTTCGCGGACTCTCATGC 437 GTCGCCAGGACTGTACACAT ATGTGTACGACTCGGCGAC 438 ACCGATCGCGAAGTCGTACACAT ATGTGTACGACTTCGCGGACC 439 TCCATAACCAGTCGAACGCCGATGACACT ATGTGTACACATCTCGCGAACCTCTGGCGAC 439 TCCCATAACCAGTCCGAACG CCTTCGGACTGCAACTCTTCGCGAAC 439 TCCCATAACCAGTCCGAACG CGTTCGGACTCCAGTCTTATGGT 439 TCCCATAACCAGTCCGAACG CGTTCGGACTCAGGACTCTTCTGGT 439 TCCCATAACCAGTCCGAACG CGTTCGGACTGCTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCTATGTGGA 441 AGACCGCATCAATTGGCGCGTACC GGTACGCCCAATTGATGCGGTCCT 442 AGAGGCTTGGCAAGTACCGG CCGGCACTTCGCAAGCCTCT 443 GCAATGGACGCCAAGTACCGG CCGGCACTTCGCAAGCCTCT 444 AGACCGCATCAATTGGCGCGTACC GGTACCGCCCAATTGATGCGGTCCT 444 AGACCGCATCAATTGGCGCGGTCCC GGTACCCGAACACACAACGACTAAGTCCAGC 445 AGGCATCGTGCCGAAGTACCGG CCGCCGAACAACACGACTAAGTCCAGC 445 AGGCATCGTGCTGGTTTCGGCGG CCGCCGCAACACACACAACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGACCAACCACACACACACCACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGACCAACCGACTAAGTCCAGC 445 AGGCATCGTGCCGGTTCCC AGGGACCAACCGACTAAGTCCAGC		418	GTTCCCGACGCCAGTCATTGAGAC	GTCTCAATGACTGGCGTCGGGAAC
15 421 CGGCGTAGCGGCTACGGACTTAAA TTTAAGTCCGTAGCCGCTACGCCG 422 GCTTGGATGCCCATGCGGCAAGGT ACCTTGCCGCATGGGCATCCAAGC 423 AGCGGGATCCCAGAGTTTCGAAAA TTTTCGAAACTCTGGGATCCCGCT 424 GAGCTTGAGAGCGAGGTCATCCTC GAGGATGACCTCGCTCTCAAGCTC 425 GCATCGGCCGTTTTGACCATATTC GAATATGGTCAAAACGGCCGATGC 426 CATAGCGCTGCACGTTTCGACCGC GCGGTCGAAACGTGCAGCGCTATG 427 ACCCGACAACCACCAATTCAAAAA TTTTTGAATTGGTGGTTGTCGGGT 428 GCGAACACTCATAAGAGCGCCCTG CAGGGCGCTTATGAGTGCGCGTTAGAGAACGTCCAGCTCTAAGAGCGCCCTG CAGGGCGCTTTATGAGTGTTCGC 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGTCTCTCACACTCGGCGG 430 GACATCGGGAGCCGGAAACATGAG CTCATGTTTCCGGCTCCCGATGTC 431 TCGTGTAGACTCGGCGACAGGCGT ACGCCTGTCGCCGAGTCTACACGA 432 ATGCGCAATAACTGACTGCGCAGG CCTGCCCGAGTCTACACCGA 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGTTGT 434 GCATGAGACCCGGAAGACATGT ACATGCTTCGCGGAGTCTCATGC 435 TCCTACATGTCGCGGAAGACATGT ACATGCTTCGCGGAACCATGTAGGA 436 GACCGATCGCGGAAGACATGT ACATGCTTCGCCGAATCATGCGAAC 437 GTCGCCAGGACTCGCAAGACAT TATGTGTACGACTTCGGCGACCATGTAGGA 438 ACCGATAAGACTTGCATCCAACAT ATGTGTACGACTTCGGCGACCATGTAGGA 439 TCCATAACCAGTCCGAACGC CTTCGGATGCAAGACTTTATGGGT 439 TCCATAACCAGTCCGAACG CGTTCGGATGCAAGTCTTATGGA 430 ACGCGCCTGCAATTGCATCCGAACG CGGCCCAGTCTAGGAACACGACTCTGCGACCATTATGGAACACATTATGGAACACATTATGAGAACTTCGGCCCAAGTCTTATGGAACACACAC		419	TAAAAGTTTCGCGGAGGTCGGGCT	AGCCCGACCTCCGCGAAACTTTTA
422 GCTTGGATGCCCATGCGGCAAGGT 423 AGCGGGATCCCAGAGTTTCGAAAA TTTTCGAAACTCTGGGATCCCGCT 424 GAGCTTGAGAGCGAGGTCATCCTC 425 GCATCGGCCGTTTTGACCATATTC 426 CATAGCGCCGTTTTGACCATATTC 427 ACCCGACAACCACCAATTCAAAAA TTTTTGAATTGGTGGTTGCGGCT 428 GCGACACCACCAATTCAAAAA TTTTTGAATTGGTGGTTGCGGGT 429 CCGCCGAGTGAAGAGCCCTG 429 CCGCCGAGTGAAGAGAGACCCCAA 430 GACATCGGGAGACCACGAACCACAGACCACAGACCACAACAGACCACAACA		420	CGGTCCAGACGAGCTGAGTTCGGC	GCCGAACTCAGCTCGTCTGGACCG
423 AGCGGGATCCCAGAGTTTCGAAAA TTTTCGAAACTCTGGGATCCCGCT 424 GAGCTTGAGAGCGAGGTCATCCTC GAGGATGACCTCGCTCTCAAGCTC 425 GCATCGGCCGTTTTGACCATATTC GAATATGGTCAAAACGGCCGATGC 426 CATAGCGCTGCACGTTTCGACCGC GCGGTCGAAACGTGCAGCGCTATG 427 ACCCGACAACCACCAATTCAAAAA TTTTTGAATTGGTGGTTGTCGGGT 428 GCGAACACCACCAATTCAAAAA TTTTTGAATTGGTGGTTCGCGC 429 CCGCCGAGTGTAGAGAGACCCCGA TCGGAGGTCTCTCACACTCGGCGG 430 GACATCGGGAGCCGGAAACATGAG CTCATGTTTCCGGCTCCCGATGTC 431 TCGTGTAGACTCGGCGGAACATGAG CTCATGTTTCCGCCTCCCGATGTC 432 ATGCGCATATACTGACTGCGCAGG CCTGCGCAGTCTACACGA 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCCGCGAAGACATGT ACATGTTTTCGCGGATCTCATGC 435 TCCTACATGTCGCGCAAGACATGT ACATGTTTTCGCGGATCTCATGC 436 GACCGATCGCGCAAGACATGT ACATGTTCTCGCGAACGTATGAGGA 30 436 GACCGATCGCGCAAGACCAT ATGTGTACGACTTCGCGATCGGTC 437 GTCGCCAGGACTCGCGCAAGCC CGTCCGCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGCACGTCTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCG CCGGCACTTCGGACTGTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCG CCGGCACTTCGGACTGTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCG CCGGCACTTCGGACTGGTCT 439 TCCATAACCAGTCCGAAGTGCCG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTACCGG CCGGTACCTTGCCAAGCCTCT 443 GCAATGGACGCCAAGACAGACCTT AGGGTCCCTACTTGCCAAGCCTCT 444 GCTGGACTTAGTCGTGTTCGGCG CCGCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGACCAACGACTAAGTCCAGC 446 AGGCATCGTGCCGGATTGCTCCCT AGGGACCAATCCGGCACGATGCCT 447 GCGCATGTCGCGGATTGCTCCCT AGGGACCAACCGACTAAGTCCAGC 447 AGGCATCGTCGCCGGATTGCTCCCT AGGGACCAACCGACTAAGTCCAGC 447 AGGCATCGTCCGACGTTTCCCCT AGGGACCAACCGACTAAGTCCAGC 447 AGGCATCGTCCGACGTTTGCCCCT AGGGACCAATCCGGCACCAATGCCCCAATTGCCAACCCAATTGCCAGCCCAATTGCCAGCCCAATTGCCAACCCAACCAA	15	421	CGGCGTAGCGGCTACGGACTTAAA	TTTAAGTCCGTAGCCGCTACGCCG
424 GAGCTTGAGAGCGAGGTCATCCTC GAGGATGACCTCGCTCTCAAGCTC 425 GCATCGGCCGTTTTGACCATATTC GAATATGGTCAAAACGGCCGATGC 426 CATAGCGCTGCACGTTTCGACCGC GCGGTCGAAACGTGCAGCGCTATG 427 ACCCGACAACCACCAATTCAAAAA TTTTTGAATTGGTGGTTGTCGGGT 428 GCGAACACTCATAAGAGCGCCCTG CAGGGCGCTCTTATGAGTGTTCGC 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGTCTCTCTACACTCGGCGG 430 GACATCGGGAGCCGGAAACATGAG CTCATGTTTCCGGCTCCCGATGTC 25 431 TCGTGTAGACTCGGCGACAGGCGT ACGCCTGTCGCCGAGTCTACACGA 432 ATGCGCATATACTGACTGCGCAGG CCTGCCGAGTCTACACGA 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCCGCGAAGACATGT ACATGTCTTCGCGGAGTCTATGC 435 TCCTACATGTCGCGTCACGATCAC GTGATCGTCACGGA 436 GACCGATCGCGAAGCACTGT ACATGTCTTCGCGGACCTCTGGC 437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCTTACGGT 438 ACCGATCGCGAAGTCGTACACAT ATGTGTACGACTTCTGCGGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGACTGCTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCGG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGCGCGT 431 AGACCGCATCAATTGGCGCGTACC GGTACGCCCCAATTGATGCA 442 AGAGGCTTGGCAAGTACCGG CCGGTACCTTGCCAAGCCTCT 443 GCAATGGACGCCAAGTACCGG CCGGTACCTTGCCAAGCCTCT 444 GCTGGACTTAGTCGGTTCCGCGC CCGCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCTTCGGCTTCCCT AGGGACCACTAAGTCCAGC 446 TGCGCATGTCGCGATTTGAACAAAG CTTTGTTCCAACGCTCACCTCT 447 GCTGGACTTAGTCGTGTTTCGCCGAACCCCTCT AGGGACCACACGACTAAGTCCAGC 448 AGGCATCGTCCGGAATTGCTCCCT AGGGACCAATCCGGCACGACCACCACCACCACCACCACCACCACCACCAC		422	GCTTGGATGCCCATGCGGCAAGGT	ACCTTGCCGCATGGGCATCCAAGC
425 GCATCGGCCGTTTTGACCATATTC 426 CATAGCGCTGCACGTTTCGACCGC 427 ACCCGACAACCACCAATTCAAAAA 427 ACCCGACAACCACCAATTCAAAAA 428 GCGAACACTCATAAGAGCGCCCTG 429 CCGCCGAGTGTAGAGAGACTCCGA 430 GACATCGGAGAGCCGGAAACATGAG 431 TCGTGTAGACTCGGCGGAAACATGAG 432 ATGCGCATATCAGAGCGCGT 433 ACAAGCGAACCCGGAACATGAG 434 ACAAGCGAACCCGAGTTTTGATTGCGCTTC 435 TCCTACATTGCGCAGG 436 GACATCGGGAGCCGGAAACATGAG 437 GCATAGACTCGGCGAAGACATGA 438 ACAAGCGAACCCGAGTTTTGATGA 439 TCCTACATGTCCGCCGAAGACATGAG 430 GACATCGGCGAAGACATGAG 431 TCGTGTAGACTCGCCAGG 432 ATGCGCATATACTGACTGCGCAGG 433 ACAAGCGAACCCGAGTTTTGATGA 434 GCATGAGACTCCGCGAAGACATGT 435 TCCTACATGTCGCCTCGAAGACATGT 436 GACCGATCGCGCAAGACATGT 437 GTCGCCAGGACCCGAAGTCAC GTGATCGTGACCGAACATGAGGA 438 ACCGATCAGCGAAGCATGAA 439 TCCATAACACGTCGAACGACCG CCTTCGGACTCCTTGCGAC 439 TCCATAACCAGTCCGAACG CGTTCGAATGCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAACG CGTTCGGACTGATTTTAGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAAGTCCTGACGGTC 441 AGACCGCATCAATTGGCGCGTACC 442 AGAGGCTTGGCAAGTACCGG CCGGTACCCTTTGCCAAGCCTCT 443 GCAATGGACGCCAAGTACCGG CCGGTACCTTTGCCAAGCCTCT 444 GCTGGACTTAGTCGTTTCGGCG CCGGCAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCCCC AGGGACCAACCGACTAAGTCCAGC 446 TGCGCATGTCGACGTTGAACAAG CTTTGTTCAACGTCGACACGCCACACCACCACCACCACCACCACCACCACCAC		423	AGCGGGATCCCAGAGTTTCGAAAA	TTTTCGAAACTCTGGGATCCCGCT
20 426 CATAGCGTGCACGTTTCGACCGC GCGGTCGAAACGTGCAGCGCTATG 427 ACCCGACAACCACTATTCAAAAA TTTTTGAATTGGTGGTTGTCGGGT 428 GCGAACACTCATAAGAGCGCCCTG CAGGGCGCTCTTATGAGTGTTCGC 429 CCGCCGAGTGTAGAGAGAGCTCCGA TCGGAGTCTCTCACACTCGGCGG 430 GACATCGGGAGCCGGAAACATGAG CTCATGTTTCCGCCCGATGTC 25 431 TCGTGTAGACTCGGCGACAGGCGT ACGCCTGTCGCCGAGTCTACACGA 432 ATGCGCATATACTGACTGCGCAGG CCTGCGCAGTCAGTATATGCGCAT 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCGCGCAAGACATGT ACATGTCTTCGCGGAGTCTCATGC 435 TCCTACATGTCGCGCAACACAT ACATGTCTTCGCGGAGTCTCATGC 436 GACCGATCGCGAAGACATGT ACATGTCTTCGCGGACATGTGAGA 437 GTCGCCAGGACTGCGAAGTCACACA ATGTGTACGACTCGGACACTGTGAGA 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGCAAGCCTATACGGT 439 TCCATAACCAGTCCGAACG CGTTCGGATGCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAACG CCGTTCGGACTGCTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGCGCT 441 AGACCGCATCAATTGCGCGGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTACCCG CCGGCCCAATTGCAGCCCTT 443 GCAATGGACGCCAAGTACCCG CCGGTATCCTACTTGCCAAGCCTCT 444 GCTGGACTTAGTCGTGTTCGGCG 445 AGGCATCGTGCCGGATTGCTCCT AGGGTCCCTACTTGCCAAGCCTCT 444 GCTGGACTTAGTCGTGTTCGGCGG 445 AGGCATCGTGCCGGATTGCTCCT AGGGACCAATAGTCCAGC 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCCCA		424	GAGCTTGAGAGCGAGGTCATCCTC	GAGGATGACCTCGCTCTCAAGCTC
427 ACCCGACAACCACCAATTCAAAAA TTTTTGAATTGGTGGTTGTCGGGT 428 GCGAACACTCATAAGAGCGCCCTG CAGGGCGCTCTTATGAGTGTTCGC 429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGTCTCTCACACTCGGCGG 430 GACATCGGGAGCCGGAAACATGAG CTCATGTTTCCGGCTCCCGATGTC 431 TCGTGTAGACTCGGCGACAGCGT ACGCCTGCGCGAGTCTACACGA 432 ATGCGCATATACTGACTGCGCAGG CCTGCGCAGTCAGTATATGCGCAT 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCCGCGAAGACATGT ACATGTCTTCGCGAGTCTCATGC 435 TCCTACATGTCGCGTCACGATCAC GTGATCGTGACGCGACATGTAGGA 436 GACCGATCGCGAAGTCATCAC GTGATCGTGACGCGACATGTAGGA 437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGCATTATGGT 439 TCCATAACCAGTCCGAACG CGTTCGGATGCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAACG CGGCCCAATTCGGACTGGTC 430 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCCAATTGATGCGAC 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCTACTTGC 443 GCAATGGACGCCAAGTACCGG CCGGTACCTTGCCAAGCCTCT 444 GCAGGACTCAGTTCGGCGC CCGGCACTTCGCCAAGCCTCT 444 GCAGGACTTAGTCCTGTTTCGCGCG CCCGCAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGACCAATCCGGCACGATGCCT 446 GCTGGACTTAGTCCGGCGC CCGCCGAACACGACTAAGTCCAGC 447 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 448 TGCGCATGTCGCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 444 GCTGGACTTAGTCCGTTTCACAAG CTTTTGTTCAACGTCGACATGCCCCAACCGATGCCTCT 444 GCTGGACTTAGTCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 446 TGCGCATGTCGACGTTGAACAAG CTTTTGTTCAACGTCGACATGCCCAACACGACTAAGTCCAGC		425	GCATCGGCCGTTTTGACCATATTC	GAATATGGTCAAAACGGCCGATGC
428 GCGAACACTCATAAGAGCGCCCTG 429 CCGCCGAGTGTAGAGAGCGCCCTG 429 CCGCCGAGTGTAGAGAGCGCCCTG 430 GACATCGGGAGCCGGAAACATGAG 431 TCGTGTAGACTCGGCGGAAACATGAG 432 ATGCGCATATACTGACTGCGCAGG 433 ACAAGCGAACCCGAGTTTTGATGA 434 GCATGAGACTCGCGCAAGACATGAT 435 TCCTACATGTCGCGCACAGGCGT 436 GACCGATCGCGAAGACATGT 437 GTCGCCAGGACTCACCAT 438 ACCGATCGCGAAGTCGTACACAT 439 TCCATAACACTTGCGCAACG 439 TCCATAACACTTGCGCAACG 439 TCCATAACCAGTCCGAACG 439 TCCATAACCAGTCCGAACG 430 ACGCGCCTGCACGATCAC 431 TCACATGTCGCGCACG 432 TCCATACTGCCGAACG 433 ACAAGCGAACCCGATGAT 434 GCATGAGACTCGCGAACGTCAC 435 TCCTACATGTCGCGTCACCAT 436 GACCGATCGCGAAGTCGTACACAT 437 GTCGCCAGGACTGGCCGATGTAA 438 ACCGATAAGACTTGCATCCGAACG 438 ACCGATAACACTTGCATCCGAACG 439 TCCATAACCAGTCCGAACG 439 TCCATAACCAGTCCGAACG 440 ACGCGCCCTGCATCTCGTATTTAA 440 ACGCGCCCTGCATCTCGTATTTAA 441 AGACCGCATCAATTGGCGCGTACC 442 AGAGGCTTGGCAAGTAGGGACCCT 443 GCAATGGACGCCAGACAGATACCGG 444 GCAGGACGCAGACGATACCGG 445 AGGCATCAGTGTCCCCT 446 GCTGGACTTAGTCGCGCGCCCAATCCTCCGCACCCCCCCC	20	426	CATAGCGCTGCACGTTTCGACCGC	GCGGTCGAAACGTGCAGCGCTATG
429 CCGCCGAGTGTAGAGAGACTCCGA TCGGAGTCTCTACACTCGGCGG 430 GACATCGGGAGCCGGAAACATGAG CTCATGTTTCCGGCTCCCGATGTC 25 431 TCGTGTAGACTCGGCGACAGGCGT ACGCCTGTCGCCGAGTCTACACGA 432 ATGCGCATATACTGACTGCGCAGG CCTGCGCAGTCAGTATATGCGCAT 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCCGCGAAGACATGT ACATGTCTTCGCGGAGTCTCATGC 435 TCCTACATGTCGCGTACACAT ACATGTCTTCGCGACTGGAC 436 GACCGATCGCGAAGTCAC GTGATCAGCACTTCGCGATCGGTC 437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATCGTTATCGGT 439 TCCATAACCAGTCCGAACTGCGCCCAGTTCTGGACTTATCGGT 439 TCCATAACCAGTCCGAACTGCGCCCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTACCGG CCGGTATCGTCTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGCGACTGCT 444 GCTGGACTTAGTCGTTTCGGCGC CCGCCAACACGACTAAGTCCAGC 445 AGGCATCGTGCTGTTTCGCCGCG CCGCCCAATCGCGCCCATTGCC 445 AGGCATCGTGCGCGGATTGCTCCCT AGGGACCAATCCGGCACAGCCTCT 446 GCTGGACTTAGTCGTGTTCGCCGC CCGCCCAACACGACTAAGTCCAGC 447 GCTGGACTTAGTCGTGTTCGCCGC CCGCCCAACACCGACTAAGTCCAGC 447 GCTGGACTTAGTCGTGTTCGCCGC CCGCCCAACACCGACTAAGTCCAGC 448 GCAATGGACGCCAGATTACCCC CTGCCGCACACCGACTAAGTCCAGC 444 GCTGGACTTAGTCGTGTTCCCCT AGGGACCAATCCGGCACAGTCCCT 444 GCTGGACTTAGTCGTGTTCCCCT AGGGACCAATCCGGCACAGTGCCT 445 AGGCATCGTGCCGGATTGCTCCCT AGGGACCAATCCGGCACAGACCCACACACACACACACACA		427	ACCCGACAACCACCAATTCAAAAA	TTTTTGAATTGGTGGTTGTCGGGT
430 GACATCGGGAGCCGGAAACATGAG CTCATGTTTCCGGCTCCCGATGTC 431 TCGTGTAGACTCGGCGACAGGCGT ACGCCTGTCGCCGAGTCTACACGA 432 ATGCGCATATACTGACTGCGCAGG CCTGCGCAGTCAGTATATGCGCAT 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCCGCGAAGACATGT ACATGTCTTCGCGGAGTCTCATGC 435 TCCTACATGTCGCGTCACGATCAC GTGATCGTGACGGACATGTAGGA 30 436 GACCGATCGCGAAGTCGTACACAT ATGTGTACGACTTCGCGATCGGTC 437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGCAGCTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCGG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGGCGTCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACATGCCTC 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		428	GCGAACACTCATAAGAGCGCCCTG	CAGGGCGCTCTTATGAGTGTTCGC
25 431 TCGTGTAGACTCGGCGACAGGCGT ACGCCTGTCGCCGAGTCTACACGA 432 ATGCGCATATACTGACTGCGCAGG CCTGCGCAGTCAGTATATGCGCAT 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCCGCGAAGACATGT ACATGTCTTCGCGGAGTCTCATGC 435 TCCTACATGTCGCGTCACGATCAC GTGATCGTGACGCGACATGTAGGA 30 436 GACCGATCGCGAAGTCGTACACAT ATGTGTACGACTTCGCGATCGGTC 437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAACG CCGTTCGGATGCAAGTCTTATCGGT 430 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGGCCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTTGCCAAGCCTCT 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCCCA		429	CCGCCGAGTGTAGAGAGACTCCGA	TCGGAGTCTCTCTACACTCGGCGG
432 ATGCGCATATACTGACTGCGCAGG CCTGCGCAGTCAGTATATGCGCAT 433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCCGCGAAGACATGT ACATGTCTTCGCGGAGTCTCATGC 435 TCCTACATGTCGCGTCACGATCAC GTGATCGTGACGCGACATGTAGGA 436 GACCGATCGCGAAGTCGTACACAT ATGTGTACGACTTCGCGATCGGTC 437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCGG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGCCAACACGACTAAGTCCAGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		430	GACATCGGGAGCCGGAAACATGAG	CTCATGTTTCCGGCTCCCGATGTC
433 ACAAGCGAACCCGAGTTTTGATGA TCATCAAAACTCGGGTTCGCTTGT 434 GCATGAGACTCCGCGAAGACATGT ACATGTCTTCGCGGAGTCTCATGC 435 TCCTACATGTCGCGTCACGATCAC GTGATCGTGACGCGACATGTAGGA 436 GACCGATCGCGAAGTCGTACACAT ATGTGTACGACTTCGCGATCGGTC 437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGGATCTATCGGT 439 TCCATAACCAGTCCGAAGTGCCGG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGGCGTCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA	25	431	TCGTGTAGACTCGGCGACAGGCGT	ACGCCTGTCGCCGAGTCTACACGA
434 GCATGAGACTCCGCGAAGACATGT ACATGTCTTCGCGGAGTCTCATGC 435 TCCTACATGTCGCGTCACGATCAC GTGATCGTGACGCGACATGTAGGA 30 436 GACCGATCGCGAAGTCGTACACAT ATGTGTACGACTTCGCGATCGGTC 437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCGG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGCAACACGACTAAGTCCAGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		432	ATGCGCATATACTGACTGCGCAGG	CCTGCGCAGTCAGTATATGCGCAT
435 TCCTACATGTCGCGTCACGATCAC GTGATCGTGACGCGACATGTAGGA 436 GACCGATCGCGAAGTCGTACACAT ATGTGTACGACTTCGCGATCGGTC 437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCGG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGGCGTCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGACAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		433	ACAAGCGAACCCGAGTTTTGATGA	TCATCAAAACTCGGGTTCGCTTGT
30 436 GACCGATCGCGAAGTCGTACACAT ATGTGTACGACTTCGCGATCGGTC 437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCGG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 35 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		434	GCATGAGACTCCGCGAAGACATGT	ACATGTCTTCGCGGAGTCTCATGC
437 GTCGCCAGGACTGGGCCGATGTGA TCACATCGGCCCAGTCCTGGCGAC 438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCGG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGGCGTCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		435	TCCTACATGTCGCGTCACGATCAC	GTGATCGTGACGCGACATGTAGGA
438 ACCGATAAGACTTGCATCCGAACG CGTTCGGATGCAAGTCTTATCGGT 439 TCCATAACCAGTCCGAAGTGCCGG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 35 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGGCGTCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA	30	436	GACCGATCGCGAAGTCGTACACAT	ATGTGTACGACTTCGCGATCGGTC
439 TCCATAACCAGTCCGAAGTGCCGG CCGGCACTTCGGACTGGTTATGGA 440 ACGCGCCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGGCGTCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		437	GTCGCCAGGACTGGGCCGATGTGA	TCACATCGGCCCAGTCCTGGCGAC
440 ACGCGCCTGCATCTCGTATTTAA TTAAATACGAGATGCAGGGCGCGT 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGGCGTCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		438	ACCGAȚAAGACTTGCATCCGAACG	CGTTCGGATGCAAGTCTTATCGGT
35 441 AGACCGCATCAATTGGCGCGTACC GGTACGCGCCAATTGATGCGGTCT 442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGGCGTCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		439	TCCATAACCAGTCCGAAGTGCCGG	CCGGCACTTCGGACTGGTTATGGA
442 AGAGGCTTGGCAAGTAGGGACCCT AGGGTCCCTACTTGCCAAGCCTCT 443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGGCGTCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		440	ACGCGCCCTGCATCTCGTATTTAA	TTAAATACGAGATGCAGGGCGCGT
443 GCAATGGACGCCAGACGATACCGG CCGGTATCGTCTGGCGTCCATTGC 444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA	35	441	AGACCGCATCAATTGGCGCGTACC	GGTACGCGCCAATTGATGCGGTCT
444 GCTGGACTTAGTCGTGTTCGGCGG CCGCCGAACACGACTAAGTCCAGC 445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		442	AGAGGCTTGGCAAGTAGGGACCCT	AGGGTCCCTACTTGCCAAGCCTCT
445 AGGCATCGTGCCGGATTGCTCCCT AGGGAGCAATCCGGCACGATGCCT 40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		443	GCAATGGACGCCAGACGATACCGG	CCGGTATCGTCTGGCGTCCATTGC
40 446 TGCGCATGTCGACGTTGAACAAAG CTTTGTTCAACGTCGACATGCGCA		444	GCTGGACTTAGTCGTGTTCGGCGG	CCGCCGAACACGACTAAGTCCAGC
		445	AGGCATCGTGCCGGATTGCTCCCT	AGGGAGCAATCCGGCACGATGCCT
447 TTCGGGTCACATCCGATGCCATAC GTATGGCATCGGATGTGACCCGAA	40	446	TGCGCATGTCGACGTTGAACAAAG	CTTTGTTCAACGTCGACATGCGCA
		447	TTCGGGTCACATCCGATGCCATAC	GTATGGCATCGGATGTGACCCGAA

	448	ACCCATCGCCGGAAAGCGATGTTG	CAACATCGCTTTCCGGCGATGGGT
	449	AAGCGCTGACTCGGCTAAGAATCA	TGATTCTTAGCCGAGTCAGCGCTT
	450	ACTTCCAAGTCCTTGACCGTCCGA	TCGGACGGTCAAGGACTTGGAAGT
	451	TCTCAATATTCCCGTAGTCGCCCA	TGGGCGACTACGGGAATATTGAGA
5	452	AACAGTTCCTCTTTTTCCTGGCGC	GCGCCAGGAAAAAGAGGAACTGTT
	453	CGTCCTCCATGTTGTCACGAACAG	CTGTTCGTGACAACATGGAGGACG
	454	TGCGCAGACCTACCTGTCTTTGCT	AGCAAAGACAGGTAGGTCTGCGCA
	455	ATGGACGGCTTCGCAGTCCTCCTT	AAGGAGGACTGCGAAGCCGTCCAT
	456	TGAACGCTTTCTATGGGCCACGTA	TACGTGGCCCATAGAAAGCGTTCA
10	457	TGAACCCTGCCGCGAGCGATAACC	GGTTATCGCTCGCGGCAGGGTTCA
i	458	GTTCTTGCGCGATGAATCAGGACC	GGTCCTGATTCATCGCGCAAGAAC
	459	AGGGTACGTGTCGCAGCTTCGCGT	ACGCGAAGCTGCGACACGTACCCT
	460	ACCCTTGCTCCGCCATGTCTCTCA	TGAGAGACATGGCGGAGCAAGGGT
	461	GGGACAAGGATTGAAGCTGGCGTC	GACGCCAGCTTCAATCCTTGTCCC
15	462	TGTCGTTGCTCCCGAGTACCATTG	CAATGGTACTCGGGAGCAACGACA
	463	GTTGTCCGAGACGTTTGTGTCAGC	GCTGACACAACGTCTCGGACAAC
	464	GCTGGTGAACACTCACGAACCGCT	AGCGGTTCGTGAGTGTTCACCAGC
	465	GCAGACAGGGCAAATCGGTGCAAA	TTTGCACCGATTTGCCCTGTCTGC
	466	CCCATCACAACGAGTGGCGACTTT	AAAGTCGCCACTCGTTGTGATGGG
20	467	GCTTCTACAGCTGGCGTGCTAGCG	CGCTAGCACGCCAGCTGTAGAAGC
	468	GAATGTGTGCCGACCATTCTAGCC	GGCTAGAATGGTCGGCACACATTC
	469	CCAGCGGAAGTTAGAGCTCTGTGG	CCACAGAGCTCTAACTTCCGCTGG
	470	TTTTTACCGACCACTCCATGTCGG	CCGACATGGAGTGGTCGGTAAAAA
	471	GCGGCTATGTGATGACGGCCTAGC	GCTAGGCCGTCATCACATAGCCGC
25	472	AGTACACGGGCGTGTTAGCGCTCC	GGAGCGCTAACACGCCCGTGTACT
	473	TCCTGTGTGGTGGCGCACTCCCAC	GTGGGAGTGCGCCACCACAGGA
	474	CCAACTAACCAATCGCGCGGATGA	TCATCCGCGCGATTGGTTAGTTGG
	475	AGTGAGTGACCAAGGCAGGAGCAA	TTGCTCCTGCCTTGGTCACTCACT
	476	CATCTTTCGCGGAGTTTATTGCGG	CCGCAATAAACTCCGCGAAAGATG
30	477	CTTCGTCCGGTTAGTGCGACAGCA	TGCTGTCGCACTAACCGGACGAAG
	478	CTCACGAAAACGTGGGCCCGAAAT	ATTTCGGGCCCACGTTTTCGTGAG
	479	CGCAGCAGCTGAACTCTAGCATTG	CAATGCTAGAGTTCAGCTGCTGCG
	480	AGGAGACATACGCCCAAATGGTGC	GCACCATTTGGGCGTATGTCTCCT
	481	ATTGAGAACTCGTGCGGGAGTTTG	CAAACTCCCGCACGAGTTCTCAAT
35	482	CTCTTTGTAGGCCCAGGAGGAGCA	TGCTCCTCGGGCCTACAAAGAG
	483	GCCGCAGGGTCGATAATTGGTCTA	TAGACCAATTATCGACCCTGCGGC
	484	AAACGCCGCCCTGAGACTATTGGG	CCCAATAGTCTCAGGGCGGCGTTT
].	485	CTGAGTTGCCTGGAACGTTGGACT	AGTCCAACGTTCCAGGCAACTCAG
1	486	CGGATGGGTTGCAGAGTATGGGAT	ATCCCATACTCTGCAACCCATCCG
40	487	CTGACCTTTGGGGGTTAGTGCGGT	ACCGCACTAACCCCCAAAGGTCAG
L	488	GGAAATGAGAACCTTACCCCAGCG	CGCTGGGGTAAGGTTCTCATTTCC

	489	AACGCATCGTCCGTCAACTCATCA	TGATGAGTTGACGGACGATGCGTT
	490	TGGAGAGAGACTTCGGCCATTGTT	AACAATGGCCGAAGTCTCTCCA
	491	TTGCGCTCATTGGATCTTGTCAGG	CCTGACAAGATCCAATGAGCGCAA
	492	AGCGCGTTAAAGCACGGCAACATT	AATGTTGCCGTGCTTTAACGCGCT
5	493	AGCCAGTAAACTGTGGGCGGCTGT	ACAGCCGCCCACAGTTTACTGGCT
	494	CGACTGATGTGCAACCAGCAGCTG	CAGCTGCTGGTTGCACATCAGTCG
	495	GGTTGCTCATACGACGAGCGAGTG	CACTCGCTCGTCGTATGAGCAACC
	496	GCGCAAATCCACGGAACCCGTACC	GGTACGGGTTCCGTGGATTTGCGC
	497	ACGCAGTTTATTCCCCTGGCTTCT	AGAAGCCAGGGGAATAAACTGCGT
10	498	AGAACCTCCGCGCCTCCGTAGTAG	CTACTACGGAGGCGCGGAGGTTCT
	499	AAAGGAGCTTTCGCCCAACGTACC	GGTACGTTGGGCGAAAGCTCCTTT
	500	AGTGATTGTGCCACTCCACAGCTC	GAGCTGTGGAGTGGCACAATCACT
•	501	GCGATCGTCGAGGGTTGAGCTGAA	TTCAGCTCAACCCTCGACGATCGC
	502	GGGAGACAGCCATTATGGTCCTCG	CGAGGACCATAATGGCTGTCTCCC
15	503	GAGACGCTGTCACTCCGGCAGAAC	GTTCTGCCGGAGTGACAGCGTCTC
	504	CCACCGGTCGCTTAAGATGCACTT	AAGTGCATCTTAAGCGACCGGTGG
j	505	CGGCATAACGTCCAGTCCTGGGAC	GTCCCAGGACTGGACGTTATGCCG
	506	AAGCGGAACGGGTTATACCGAGGT	ACCTCGGTATAACCCGTTCCGCTT
	507	TGCACACTAGGTCCGTCGCTTGAT	ATCAAGCGACGGACCTAGTGTGCA
20	508	AGGGAACCGCGTTCAAACTCAGTT	AACTGAGTTTGAACGCGGTTCCCT
	509	GAATTACAACCACCCGCTCGTGTT	AACACGAGCGGGTGGTTGTAATTC
	510	TTCAGTGCTCACGAAGCATGGATT	AATCCATGCTTCGTGAGCACTGAA
	511	TTAGTTTGGCGTTGGGACTTCACC	GGTGAAGTCCCAACGCCAAACTAA
	512	AATGCGACCTCGACGAGCCTCATA	TATGAGGCTCGTCGAGGTCGCATT
25	. 513	CCGAAACCGTTAACGTGGCGCACA	TGTGCGCCACGTTAACGGTTTCGG
	514	TAAAGTAACAAGGCGACCTCCCGC	GCGGGAGGTCGCCTTGTTACTTTA
	515	TAATGATTTTAGTCGCGGGGTGGG	CCCACCCGCGACTAAAATCATTA
	516	GGCTACTCTAAGTGCCCGCTCAGG	CCTGAGCGGGCACTTAGAGTAGCC
	517	TGGCGGACGACTCAATATCTCACG	CGTGAGATATTGAGTCGTCCGCCA
30	518	GGGCGTTAGGCGTAATAGACCGTC	GACGGTCTATTACGCCTAACGCCC
	519	GCCACCTTTAGACGGCGGCTCTAG	CTAGAGCCGCCGTCTAAAGGTGGC
	520	GAGATGTGTAAACGTGCAGGCACC	GGTGCCTGCACGTTTACACATCTC
	521	TAGCTCGTGGCCCTCCAAGCGTGT	ACACGCTTGGAGGGCCACGAGCTA
	522	GTGTCGGCGCTATTTGGCCTTACC	GGTAAGGCCAAATAGCGCCGACAC
35	523	CCAGGGAAGCAACTGGTTGCCATT	AATGGCAACCAGTTGCTTCCCTGG
	524	TTCCGAAACTAAGCCAGAACCGCT	AGCGGTTCTGGCTTAGTTTCGGAA
	525	GCAAACCCGGTAACCCGAGAGTTC	GAACTCTCGGGTTACCGGGTTTGC
	526	GCAAATGGCGTCATGCACGAACGT	ACGTTCGTGCATGACGCCATTTGC
	527	AGTACTTTCGCGCCCAGTTTAGGG	CCCTAAACTGGGCGCGAAAGTACT
40	528	AAGATCTGCGAGGCATCCCGGCTT	AAGCCGGGATGCCTCGCAGATCTT
l	529	GCAAGTGTATCGCACAGTGCGATT	AATCGCACTGTGCGATACACTTGC

Į <u>.</u>	530	CCGACAAGGCCTCAATTCATTCTG	CAGAATGAATTGAGGCCTTGTCGG
	531	GTCTCGTCTCAACTTTAAGGCGCG	CGCGCCTTAAAGTTGAGACGAGAC
	532	ATCCAGAGATCCGTTTTGCAGCGT	ACGCTGCAAAACGGATCTCTGGAT
	533	GTCACCAGGAGGGAAGTTTCACCC	GGGTGAAACTTCCCTCCTGGTGAC
5	534	TTCCGTCAGGCGGATCAACGGAAT	ATTCCGTTGATCCGCCTGACGGAA
ſ	535	ATGCCGGACACGCATTACACAGGC	GCCTGTGTAATGCGTGTCCGGCAT
Γ	536	TGGGCCGCTTGGCGCTTTCATAGA	TCTATGAAAGCGCCAAGCGGCCCA
ſ	537	CCTAGCGCGAGCTTTACTGACCAG	CTGGTCAGTAAAGCTCGCGCTAGG
	538	TTGGCCAGGAATATGGTCTCGAGA	TCTCGAGACCATATTCCTGGCCAA
10	539	GTCTGCGGCCGACTTGCTATGCAT	ATGCATAGCAAGTCGGCCGCAGAC
	540	AACTTGCTCATTCTCAAGCCGACG	CGTCGGCTTGAGAATGAGCAAGTT
	541	ACGTCAGCGATTGTGGCGAAATAT	ATATTTCGCCACAATCGCTGACGT
	542	ACGGCCTGCGTCAGCACATGCATC	GATGCATGTGCTGACGCAGGCCGT
	543	ATACCTCCGCAGAACCATTCCGTT	AACGGAATGGTTCTGCGGAGGTAT
15	544	AGTTCGCGGTCCCACGATTCACTT	AAGTGAATCGTGGGACCGCGAACT
	545	TGCTCAATTTGTGCAGAAAACGCC	GGCGTTTTCTGCACAAATTGAGCA
1	546	TTATCGCGAGAGACGACCGTGTCC	GGACACGGTCGTCTCTCGCGATAA
	547	GACGCGACGTGAGTAGTGGAAGCG	CGCTTCCACTACTCACGTCGCGTC
	548	ATGGTAGGGCATTGGGCTTTCCT	AGGAAAGCCCAATGCCCCTACCAT
20	549	CCAAATATAGCCGCGCGGAGACAT	ATGTCTCCGCGCGGCTATATTTGG
	550	GCAAACCCTGATTGAATCGTGCCC	GGGCACGATTCAATCAGGGTTTGC
	551	TAGCGTCTTGCGTGAAACCATGGG	CCCATGGTTTCACGCAAGACGCTA
	552	CCACCCGACAGCGCTGGACTCTT	AAGAGTCCAGCGCTGTCGGGGTGG
Ļ	553	ACGAGCACTGAAGGCTGCTTTACG	CGTAAAGCAGCCTTCAGTGCTCGT
25	554	CATATCAGCGTCGTCTAGCTCGCG	CGCGAGCTAGACGACGCTGATATG
	555	TGATCCCGGACCGGCTAGACTAAT	ATTAGTCTAGCCGGTCCGGGATCA
	556	GGCCCGACACTACAGGGTAATCA	TGATTACCCTGTAGTGTCGGGGCC
	557	GGCTCCAGGGCGAGATTATGAATG	CATTCATAATCTCGCCCTGGAGCC
_	558	CAAAATCCGATGGGCGGAAAATTA	TAATTTTCCGCCCATCGGATTTTG
30	559	CACAGGCGCATAGGGAGCAAGCTA	TAGCTTGCTCCCTATGCGCCTGTG
L	560	TAGCTATTGCCCCGATGGGCTACT	AGTAGCCCATCGGGGCAATAGCTA
_	561	TGGTACGCGGTCCATAGCAAGTCG	CGACTTGCTATGGACCGCGTACCA
<u> </u> _	562	GACGCTGTGGCTCGGAAACTGTTC	GAACAGTTTCCGAGCCACAGCGTC
_	563	CCTGGGTTCGCCGCGTGGTAACTG	CAGTTACCACGCGGCGAACCCAGG
35	564	TTCCCGCGTAGCCCAACAGCTATA	TATAGCTGTTGGGCTACGCGGGAA
	565	TTCGCGGATTGCTGCCGCATAACA	TGTTATGCGGCAGCAATCCGCGAA
	566	AAAAATGGCACCGAAGTTGAGGCA	TGCCTCAACTTCGGTGCCATTTTT
	567	CATTCCGCGCGAGTTGAAATCCAG	CTGGATTTCAACTCGCGCGGAATG
	568	ACGCACGTTTTTTGGCACGGTTAA	TTAACCGTGCCAAAAAACGTGCGT
40	569	TGTCCATGACGTCGTTTCTCTGGT	ACCAGAGAAACGACGTCATGGACA
	570	TCTCAGTCGGACTCGTATGCCAGA	TCTGGCATACGAGTCCGACTGAGA

	571	CTCCAAACGCACACATCAAGCATC	GATGCTTGATGTGTGCGTTTGGAG
	572	TTCAACCAAGCGGGGTGTTCGTGA	TCACGAACACCCCGCTTGGTTGAA
	573	GGTGTCGGAGGGTGGTGACCTCGA	TCGAGGTCACCACCCTCCGACACC
	574	AGCGCTTTTGGTCATGATTTGCAA	TTGCAAATCATGACCAAAAGCGCT
5	575	CCGAGGACTTACGTCTGCCCAGGA	TCCTGGGCAGACGTAAGTCCTCGG
	576	GCCCAATCCAGTTCTTATGCGCCC	GGGCGCATAAGAACTGGATTGGGC
	577	CGGGTTAACCCACGCAAGTTATGA	TCATAACTTGCGTGGGTTAACCCG
	578	TGATTAGCGCTCAATACACGCGTG	CACGCGTGTATTGAGCGCTAATCA
	579	AAGGCAGACCTTTGGTTCGACTG	CAGTCGAACCAAAGGTCTGCCCTT
10	580	GCGCCACAAGATTCACATGTCATT	AATGACATGTGAATCTTGTGGCGC
	581	GCCATGTTCAAGGGCCTTTCGAAG	CTTCGAAAGGCCCTTGAACATGGC
	582	CGCGGTGTTTTGTCTAGGTGCCGG	CCGGCACCTAGACAAAACACCGCG
	583	CAACATTGTGGTGGCACTCCATCC	GGATGGAGTGCCACCACAATGTTG
	. 584	CGATACGCGCCGGTTTGTTAAATC	GATTTAACAAACCGGCGCGTATCG
15	585	GGCTATAAACGTGCGGACTGCTCC	GGAGCAGTCCGCACGTTTATAGCC
	586	TGGGTAAATCACTATTGCGCGGTT	AACCGCGCAATAGTGATTTACCCA
	587	GTCTTCATCGGCCCGCGCAAGCTA	TAGCTTGCGCGGGCCGATGAAGAC
	588	GCGACACCCTGTACTCTGATGC	GCATCAGAGTACAGGGTGTGTCGC
	589	GTAGCAGGGTCCGCAAGACCAAGC	GCTTGGTCTTGCGGACCCTGCTAC
20	590	TCGCCAACGCAGGGTAACTGCCAT	ATGGCAGTTACCCTGCGTTGGCGA
	591	ACTCCGAAGCTTCGAGCGGCACGA	TCGTGCCGCTCGAAGCTTCGGAGT
	592	TCCCGCCCACTAGACTGACTCGTA	TACGAGTCAGTCTAGTGGGCGGGA
	593	ACCTTCTGGGGTCGCTCACCAATA	TATTGGTGAGCGACCCCAGAAGGT
	594	ATCATCCCACGGCAGAGTGAAGAG	CTCTTCACTCTGCCGTGGGATGAT
25	595	CGCTGGACTGGCCTATCCGAGTCG	CGACTCGGATAGGCCAGTCCAGCG
	596	CGGTCTCAGCAACACTGTCGCAAA	TTTGCGACAGTGTTGCTGAGACCG
	597	CGAACGTTCTCCGATGTAATGGCC	GGCCATTACATCGGAGAACGTTCG
	598	ATACCGTGCGACAAGCCCCTCTGA	TCAGAGGGGCTTGTCGCACGGTAT
	599	AGCTCATTCCCGAGACGGAACACC	GGTGTTCCGTCTCGGGAATGAGCT
30	600	TTTCATGCGGCCGTTGCAAATCAT	ATGATTTGCAACGGCCGCATGAAA
	601	ACTCGAACGGACGTTCAATTCCCA	TGGGAATTGAACGTCCGTTCGAGT
	602	CTGCATGGTGTGGGTGAGACTCCC	GGGAGTCTCACCCACACCATGCAG
	603	CCGCGAGTGTGGATGGCGTGTTGA	TCAACACGCCATCCACACTCGCGG
	604	AATGTGTCGGTCCTAAGCCGGGTG	CACCCGGCTTAGGACCGACACATT
35	605	TAAGACGAGCCTGCACAGCTTGCG	CGCAAGCTGTGCAGGCTCGTCTTA
	606	GGCGTGGGAGGATAAGACGATGTC	GACATCGTCTTATCCTCCCACGCC
	607	TGCTCCATGTTAGGAACGCACCAC	GTGGTGCGTTCCTAACATGGAGCA
	608	CGGTGTTGGTCGGACTGACGACTG	CAGTCGTCAGTCCGACCAACACCG
	609	CCGCGCGTATCTATCAGATCTGGG	CCCAGATCTGATAGATACGCGCGG
40	610	AAAGCATGCTCCACCTGGAGCGAG	CTCGCTCCAGGTGGAGCATGCTTT
	611	ACTTGCATCGCTGGGTAGATCCGG	CCGGATCTACCCAGCGATGCAAGT

	612	TGCTTACGCAGTGGATTGGTCAGA	TCTGACCAATCCACTGCGTAAGCA
	613	ATGCAGATGAACAAATCGCCGAAT	ATTCGGCGATTTGTTCATCTGCAT
	614	GCAATTCTGGGCCATGTATTCGTC	GACGAATACATGGCCCAGAATTGC
	615	AGGGTTCCTTACGCGTCGACATGG	CCATGTCGACGCGTAAGGAACCCT
5	616	GTGGAGCTAATCGCGAGCCTCAGA	TCTGAGGCTCGCGATTAGCTCCAC
	617	TCGTAGTCTCACCGGCAATGATCC	GGATCATTGCCGGTGAGACTACGA
	618	TTATAGCAGTGCGCCAATGCTTCG	CGAAGCATTGGCGCACTGCTATAA
	619	CGAACAGTGCTGTCCGTCGCTCAA	TTGAGCGACGGACAGCACTGTTCG
	620	TCCGCGTGGACTGTTAGACGCTAT	ATAGCGTCTAACAGTCCACGCGGA
10	621	CATTAGCCCGCTGTCGGTAACTGT	ACAGTTACCGACAGCGGGCTAATG
	622	GGAAAGAAACTCAGACGCGCAATG	CATTGCGCGTCTGAGTTTCTTTCC
	623	CGACTCGCTGGACAGGAGAATCGT	ACGATTCTCCTGTCCAGCGAGTCG
	624	CATGATCCTCTGTTTCACCCGCGG	CCGCGGGTGAAACAGAGGATCATG
	625	GGCGTAGCGCTCTAAAAGCTTCGG	CCGAAGCTTTTAGAGCGCTACGCC
15	626	AGTGATGCCATCAGGCCCGTATAC	GTATACGGGCCTGATGGCATCACT
	627	TATGGAAAGGGCAACAGCGCTATC	GATAGCGCTGTTGCCCTTTCCATA
	628	CTGTGGTTGATGGAGGATCCACAC	GTGTGGATCCTCCATCAACCACAG
	629	ACTCGCTGGAATTTGCGCTGACAC	GTGTCAGCGCAAATTCCAGCGAGT
	630	CAGGCCCGAACCACGCGGTTACAG	CTGTAACCGCGTGGTTCGGGCCTG
20	631	GGCGCAATGGGCGCATAAATACTA	TAGTATTTATGCGCCCATTGCGCC
	632	GGTCAATTCGCGCTACATGCCCTA	TAGGGCATGTAGCGCGAATTGACC
	633	GATGGTGGACTGGAGCCCTTCCGC	GCGGAAGGGCTCCAGTCCACCATC
	634	CCGCGCATAGCGCAATAGGGGAGA	TCTCCCCTATTGCGCTATGCGCGG
	635	TCTTCTGGCTGTCCGGCACCCGAA	TTCGGGTGCCGGACAGCCAGAAGA
25	636	GCGTTCGCAATTCACGGGCCCTTA	TAAGGCCCGTGAATTGCGAACGC
	637	TCGTTTCGGCCTTGGAGAGTATCG	CGATACTCTCCAAGGCCGAAACGA
	638	AGGTGCAAGTGCAAGGCGAGAGGC	GCCTCTCGCCTTGCACCT
	639	CGCCAGTTTCGATGGCTGACGTTT	AAACGTCAGCCATCGAAACTGGCG
	640	GCTTTACCGCCGATCCCAGATATC	GATATCTGGGATCGGCGGTAAAGC
30	641	GTGCTTGACGAAGAGGCGAAATGT	ACATTTCGCCTCTTCGTCAAGCAC
	642	CAGTCCGTGCGCTTCATGTCCTCA	TGAGGACATGAAGCGCACGGACTG
	643	TACGCGTAAGAGCCTACCCTCGCG	CGCGAGGGTAGGCTCTTACGCGTA
	644	GGCGAGTCTTGTGGGGACATGTGT	ACACATGTCCCCACAAGACTCGCC
	645	CCAAAGCGAAGCGAGCGTGTCTAT	ATAGACACGCTCGCTTCGCTTTGG
35	646	GCCGTAGGTTGCTCTTCACCGAAC	GTTCGGTGAAGAGCAACCTACGGC
	647	AAATCCGCGATGTGCCGTGAGGCT	AGCCTCACGGCACATCGCGGATTT
	648	GGCTTCGCACCCGTACCAATTTAG	CTAAATTGGTACGGGTGCGAAGCC
	649	TGTAGAGTCCCACGTAGCCGGCAT	ATGCCGGCTACGTGGGACTCTACA
	650	CACTAGTCTGGGGCAAGGTGCATT	AATGCACCTTGCCCCAGACTAGTG
40	651	TGTACTCGGCAGGCGCAATAGATT	AATCTATTGCGCCTGCCGAGTACA
	652	AACGGGTATCGGAAGCGTAAAAGC	GCTTTTACGCTTCCGATACCCGTT

653 CGGACTGCCCGTTTGCAAGTTGAG CTCAACTTGCAAACGGGCAGTCCG 654 ATCGTTCAGCACTGGACCCGTAA TTACGGGCTCCAGTGCTGAACGAT 655 ATGCATCGAACTAGTCGTGACGGC GCCGTCACGACTAGTTCGATGCAT 656 ATGCATCGACTAGTCGTGACGGC GCCCCTCTCCTTAATGCCTGCAA 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGAGATTGCATCCAC 658 CTCATCGTCCTAACACGAGAGCCC GGCTCTGCTTAATGCACGACGACCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTGGTGAGACGACGACGACCACCACGAGACCCC GGGCTCTGGTGAACTGCACCACCGACGACCCC 658 CATGGCACATCTACCCACGAGACCC GGCCTCAGCAGAGCCATCAC 659 AATGGCACTTCGGCGGTGATGCAA TTCCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGAGATCCAACCCACGACG CTCACCTACACACGAGAATTT 10 862 TTGCTTTATCCTTGTCTGGGCG CGCCAAGACACGACTAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGAA CTGCAACCCCCCCCTATCCTTAA 664 CGCGACTAAGGTGCATCCA CTGCAACCACCACCACGACAACA 665 GCTCGATTTCACGGCCGAGACCTTCAA TCACACCCCCCTGATCCTTAA 666 AGCAGAGTGCGTTGCAACTCCA CCGCACACCACACCAC				
655 ATGCATCGAACTAGTCGTGACGGC GCCGTCACGACTAGTTCGATGCAT 656 TTCCAGGCATTAAGGAGAGGAGC GCTCCCTCTCTTAATGCCTGAA 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGAGATGCCAC 658 CTCATCGTCCTAACACAGAGAGCCC GGGATCGTGGATTAGGACAGTGCAC 659 AATGCCACTTCGGCGGTGATGCAA TTGCATCACGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTTAGGACCATCAGC 661 AAATTCTCGTTGGTGGAGGGCTAT ATGAGCCGTCACCAACGAGAATTT 10 662 TTGCTCTTATCCTTGGTCGGGGCCCCACCAACGAGAATTT 663 CCGGACTAAGGTGCACTAT ATGAGCCGTCACCAACGAGAATTT 664 CCGGACTAAGGTGCTGCACCCAGC CGCCCAGGACAAGGACATTGACACGAGGAATTCAACGAGCGAG		653	CGGACTGCCCGTTTGCAAGTTGAG	CTCAACTTGCAAACGGGCAGTCCG
658 TICCAGGCATTAAGGAGGAGC GCTCCCTCTCTTAATGCCTGGAA 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGGAGTAGATGTCCACC 658 CTCATCGTCCTAACACGAGCCC GGGCTCTCGTGTTAGGACGATCGAC 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGAGGACGACGAGGCCAT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGAATTCCTCCACCGG 661 AAATTCTCGTTGGTGCACGAGC CCTCGGTTGGATTCCCTCCCACCG 661 AAATTCTCGTTGGTGCACGGC CCCCCACCAACGAGATTT 10 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGACCAA 663 TTAAGGATCAGCGCAGCACCAACGAGAATTT 664 CGCGACTAAGGTGCTGCAG CTGCAAGCTCCGCCTGATCCTTAA 665 GCTCGATTTCACGGCCCGTTGTTC GAACACCGCGCTGAACTCGAC 666 AGCAGAGTGCGTTGCAGAGCTCAA TTAGCCTCCGCCCTGAACTCGAC 667 TGGAGGTGCATGCAGAGGCTAA TTAGCCTCTCCACCGCA 668 AACCGTTTAGGGTACATTCGCGGT ACCGAACTTCCTCACCTCCA 668 AACCGTTTAGGGTACATTCGCGGT ACCGAACTTCCCACCCCAC		654	ATCGTTCAGCACTGGAGCCCGTAA	TTACGGGCTCCAGTGCTGAACGAT
5 657 GTGCGACATCTACTCACGATCCC 658 CTCATCGTCTACACAGAGAGCCC 658 CTCATCGTCCTACACAGAGAGCCC 659 AATGCACTTCGGCGGTGATGCAA 659 AATGCACTTCGGCGGTGATGCAA 660 CCGTGGGAGGGAATCCAACCGAGG 661 AAATTCTCGTTGGTGACAGCTCAACCGACGCACCACCGAGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 10 662 TTGCTCTTATCCTTGTCCTGGCG 663 TTAAGGATCAAGGGCGCAAT 664 CGCGACTAAGGTGCTGCAACCTCAAG 665 GCTCGATTCACGACGCCGTTTCC 666 AGCACAAGTGCTTCCAACCTCAA 666 AGCACAAGTGCGTCCAACTCAA 666 AGCACAAGTGCTGCACCTCAA 666 AGCACAAGTGCGTCCAACTCAA 666 AGCACAAGTGCGTCCAACTCAA 666 AGCACAAGTGCGTTCCAACCTCAA 666 AGCACAAGTGCGTTCCAACCTCAA 667 TGGAGGTGAGCACCAACTTTC 666 AGCACAAGTGCGTTCCAACACTTCAACCGGCCGTGAAACCACCTCTGCT 667 TGGAGGTGAGCACACACTTTC 668 AACCGTTTAGGGACACACACACTTTGC 668 AACCGTTTAGGGTACATTCACGGGT 669 TATAATCGCTCGGCTCACACTTTG 670 GACTTTTTCCACGGCCACACTTTG 671 TGTCGGTTATTCCACCGCCACACTTTG 672 CTATGGTTTCCACCTCCAACGACACACCACACCACACCA		655	ATGCATCGAACTAGTCGTGACGGC	GCCGTCACGACTAGTTCGATGCAT
658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAC 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGACCCGTCACCAACGAGAATT 10 662 TTGCTCTTATCCTTGGTCGGCG CGCCCAGGACAAGGACAATG 663 TTAAGGATCAGGCGGAGCTTGCAG 664 CGCGACTAAGGTGCTGCAG 665 GCTCGATTCACGGCCGCTTGAT TCGAGCTGCACCACCAGAAATTCGAG 666 AGCAGAGTGCGTTCCAGAGGCTAA TTACCCTCGCCTGATCCTTAA 667 TGGAGGTGAGGCCACCTGAACTCGA TCGAACACGGCCGTGATACCGCC 668 AGCAGAGTGCGTTCCAGAGGCTAA TTACCCTCTCCCACCTCCA 668 AACCGTTTAGGGCACACCTA TAGTGCACGTCCTCTCCACCTCCA 669 TATGATCGCTCGGCCACACTT TAGTGCACGTCCTCTCCACCTCCA 660 TTGGAGGTCAACTTCGCGCT 660 TATGATCGCTCGGCCACACTT ACCGGATGTACCCTAACGGTT 660 TATGATCGCTCGGCACACTTTG 660 TATGATCGCTCGGACACGTTG 661 TGCAACTTTTCCACCTCCAACGGA 671 TGTCGGTTATTCCACCTCCAACGGA 672 CTATGGTTTGCACTCCAACGGA 673 AGCAGGGAAATTCAATCGTCGCA 674 CCTAACCGACCCTTCCA 675 CCCGACCCTAACTCGCACGCA 675 CCCGACCCTAACTCGCACGGA 676 TTGCTTAATGGTGACATTTCC 676 TTGCTTAATGGTACCGCCGTCGA 677 GATGCTCGCACGGAT 678 TCGGACGATTTCACACTTCCACCGAC 679 ATGCGGCTCACCTTTACCATTTCACC 679 ATGCGGCGTTACCATTTCC 679 ATGCGGCGCTTTACCATTTCACC 679 ATGCGGCTCACCTTTACCACTTCACCGGCTCACCATTAACCACATAG 679 ATGCGGTTACCATTTCCACTCGCACGGAT 679 ATGCGGTCACCTTTACCATTTCACCCCCCCCCCCCCCCC		656	TTCCAGGCATTAAGGAGAGGGAGC	GCTCCCTCTCCTTAATGCCTGGAA
659 AATGGCACTTCGGCGGTGATGCAA 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATCCCTCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 10 662 TTGCTCTTATCCTTTGCTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 663 TTAAGGATCAGGCGGAGCTTGCAG CGCCCAGGACAAGGATAAGAGCAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAAGTCCGGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAAGTCCGCCTGATCCTTAA 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTTGCT 667 TGGAAGTGAGGACGACGTGCACTA TAGTCCACGACCCTTCCCA 668 AACCGTTTAGGGTACATTCGCGGT ACCGCAATGTACCCTAAACCGTTC 668 TATGATCGCTCGGCTCACATTTG CAAACAGGGCCCTTAACCGTTCCA 669 TATGATCGCTCGGCTCACATTTTT CAAACTGTGAGCCGAGCGATCATA 670 GACTTTTTGCGGAAACGTCATGT ACCATAAACAGGT 671 TGTCGGTTATCCACCTGCAAGGA TCCTTCACATGACCTAAACCGTT 672 CTATGGTTTGCACTGCGCCCTCGA TCGACGGGCGATCATA 673 AGCAGGGAAATTCAATCGTTCCGA TCGACGGCGCGATCATAACCATAG 674 CCTTAACCGACGCCCTTGAATA TATTCAATGCGAGCTGCTTCCTCCTCCTC 675 AGCAGGGCATTCAATCGTTCCCA TGCGAACGATTGAATTCCCTGCT 676 TTGCTTAATGGTGACCGCCCTCGA TCGACAGGTTAACCATAG 677 CATGCTTACTGCACTTTCCC GGAAATGCTAACCATAGCAA 678 TGCGTACCCCTAACTTCGCATTGAATA TATTCAATGCGAGTTAGGGTCCGGT 678 TCGGATGACGAGTTTCATTCC GGAAATGCTAACCACTATACCAA 679 ATGCGGTCTACTTTCTCGATCGGG CCGTGAAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCATTCACG CCGTGAACTAAACACAGGCGAGCATC 678 TCGGATGACGAGTTTCATTCTCACCG CCGTCTAGGAAAACTCGTCACCCAA 681 AACTTAATTACCGCCTCTGGCCC CCGTCATGGAAAATTCACCGCA 682 TGCGGATAACCACACGGTAAA 1TTACCGTGTGTGTTTAGCTCCCAA 683 TGCGGATTACCTTCTTCAACG CCGCATCGAAACACCACGCTAAC 684 TGATAGGGGGCCACGTTGATCAAA TTAAACACAGGCGGAGCATC 685 TCGCTCCGTAGCCACTCTTAA 1TTACAGGGAACTCAACCGCCAA 686 TGCGCCAACTTTACTCTTAA 1TTAAAGAGCGAACTGGTAACCCCAA 687 AGCGTCGCATTGACCACCGGTTAA 1TTAAAGAGCGAACCGCTTAACAAC 688 TCGCTCCGTTAGCGCC CGGCCCAAGAGCACCACCACAAC 688 TCGCTCCGTTAGCGCTCCTTTAA 1TTAAAGAGCAACCGCTTAACAAC 688 TCGCTCCGTTAGCGCCCCCCTATCAA 688 TCGCTCCGTTAGCGCCCCCCTATCAAC 688 TCGCTCCGTAGCCGTTACGCAC CTGCCCCACTATCACA 689 GTTTCCGCTTTGACCTCCCACACCCCCACCACACC 689 GTGCCATTACGGCACCCTCAACC 689 GTGCCATTACGGCACCCCACGCCCCCACACCCCCACACC 689 TCGCATTCTGGCACCCC	5	657	GTGCGACATCTACTCCACGATCCC	GGGATCGTGGAGTAGATGTCGCAC
660 CCGTGGGAGGGATCCAACCGAGG CCTCGGTTGGATTCCCTCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 10 662 TTGCTCTTATCCTTGTCCTGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGAGACTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCCCTGATCCTTAA 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTCAAGAGCTAA TTAGCCTCTGCAACGCACCTTAGTCGCG 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACCTCGCT 668 AACCGTTTAGAGGACCAACTAA TAGTGCACGCACCTCACCT		658	CTCATCGTCCTAACACGAGAGCCC	GGGCTCTCGTGTTAGGACGATGAG
681 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGATTT 662 TTGCTCTTATCCTTGTCCTGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAATCGCG 665 GCTCGATTCACGGCCCGTTGTTC GAACAACGGCCCTGAAACTGCGC 666 AGCAGAGTGCAGCCCTTGTTC GAACAACGGCCCTGAAACTGCGC 666 AGCAGAGTGCATTGCAGAGCCTAA TTAGCCTCTGCAACGACTCTGCT 668 AACCGTTTAGGGTACATTA TAGTGCACGTCCTCACCTCCA 668 AACCGTTTAGGGTACATTA TAGTGCACGTCGTCTCACCTCCA 668 AACCGTTTAGGGTACATTTGCAGTACACTGCAACACTGTCCTCCACCTCCA 669 TATGATCGCTCGGCTCACAGTTTG CAAACTGTGAGCCGAGCGATCATA 670 GACTTTTTGCAGCTGCAAGGAT TACCTGAGACGTTTCCCCAAACAGTT 671 TGTCGGTTATCCACCTGCAAGGA TCCTTCAGCTGCAACACATACT 672 CTATGGTTTGCACTGCAAGGA TCCTTCAGCTGCAAACACTCA 673 AGCAGGGAAATTCAATCGTTCGCA 674 CCTAACCGAGCGCTTAGCATTTCC GGAAACGATGAATTTCCCTGCT 674 CCTAACCGAGCGCTTAGCATTTACATA TCTTCAATGCGCCCAGTTAGGGTCAGGA 675 CCCGACCCTAACTGCATTGAATA TATTCAATGCGGTCAGTTAGGG 676 TTGCTTAATGGTGACCCACGGAT ATCCGTGCAGCATTAGGGACGAGATAACACGGCAGACACACAGA 677 GATGCTCGCCGTGTTTAGTTCACG CGGAACTAAACACGGCAGACACAC 678 ATGCGGTTACTTTTCCATCGGG CCGATCGAAAAACTCGGCACAT 679 ATGCGGTTACTTTTCCATCGGG CCGATCGAAAAACTCGCTCACAA 680 TTGCGAAGCAACACGGTAAA TTTACCGTGGAAACTCGTCACAA 681 AACTTAATTACCGCCTCTGGCCC GCGCACGAGCAGCATTCACCGA 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAAACTCGTCACAA 683 TCCGGATTACCGATTCCATCAACAG CCCACAGAGCCGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGCAAAACACGGCAACAGTAACACAGGCAACAGTCGCAACAGGAAAGTTACGCCAA 684 TGATAAGGGGGCCACTTGGTCCGAACAGCTCGCAACAGCGCCCCTATCA 685 TCCGCTCCGTAGCATTCACTCGAA TTAAAGAGAGAGCCCCCCTATCA 686 TGATAACGGGACCTTCGCCTCTTAA TTAACGGAACAGTCGCACACGGAACAGTTCGCGCAC 687 TCAGCAGGACTTCACTCGAAC CTGTCGCACACACGGTAAACACGGCAACACGGCAACACGGCAACACGGCAACACGGCAACACGGCAACACGGCAACACGGCAACACGGCAACACGGCAACACGGCAACACGGCAACACGGCAACACGGCCAACACGGCCAACACGCTTACAACACGGCACACACGGAACACGGCCAACACGGCAACACGGCCAACACGGAACACGGCCAACACGGCCAACACGGCCAACACGGCCAACACGGCCAACACGGCCAACACGGCCAACACGGCCAACACGGCCAACACGGCCAACACGGCCAACACGGCCAACACGGCAACACGGCCAACACGGCCAACACAGGGCAACCACACGCCCAACACGGAACACGGCCAACACGGCAACCACACGCCCAACACGGCCAA		659	AATGGCACTTCGGCGGTGATGCAA	TTGCATCACCGCCGAAGTGCCATT
10 662 TTGCTCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAAGCTCCGCCTGATCCTTAA 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAAGCGCACTTTTC GAACAACGGGCCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAAGAGCTAA TTAGCTCTGCAACGCACTCTGCT 667 TGGAGGTGAGGACGACCAA TAGTGCACGCACCTCACCT		660	CCGTGGGAGGGAATCCAACCGAGG	CCTCGGTTGGATTCCCTCCCACGG
663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCCCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACCTTGCT 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGCACCTCTGCT 668 AACCGTTTAGGGTACATTCGCGGT ACCGCGAATGTACCCTCAA 669 TATGATCGCTCGGCTCACAGTTTG CAAACTGTGACCCTAAACGGTT 670 GACTTTTTGCGGGTACACAGTTTG CAAACTGTGACCCTAAACGGTT 671 TGTCGGTTATTCCACCTGCAAGGA TCCTTGCAGGAGCGATCATA 672 CTATGGTTTTCCACCTGCAAGGA TCCTTGCAGGGGCAAAAAAGTC 673 AGCAGGGAAATTCAACTCGTTCGCA TCGAGAGGGGATGAAACCATAG 674 CCTAACCGAGCGCTTAGCATTTCC GGAAACTGATGACCTTAACCGTC 675 CCCGACCCTAACTCGCATTTCACCTTGCAT 676 TTGCTTAATGGTGACCCACGGAT 677 GATGCTCACCTGCAATTCC GGAACGATTGAGGTTAGGGTCGGG 678 TTGCTTAATGGTGACCCACGGAT 679 ATGCGGCCCACGGAT 679 ATGCGGCTTACTTTCCACTGCACGGACGCACCACATTAGCACACACA		661	AAATTCTCGTTGGTGACGGCTCAT	ATGAGCCGTCACCAACGAGAATTT
664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGGCTAA TTAGCCTCTGCAACGCACTCTGCT 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCGTCCTCACCTCCA 668 AACCGTTTAGGGTACATTCGCGGT ACCGCGAATGTACCCTAAACGGTT 669 TATGATCGCTCGGCTCACAGTTTG CAAACTGTGAGCCGAGCGATCATA 670 GACTTTTTGCAGCTGAAACGTCATGGT ACCATGAGCGAGCGATCATA 671 TGTCGGTTATTCCACCTGCAAGGA TCCTTGCAGATAACAGTC 672 CTATGGTTTGCACTGCGCCGTCGA TCGACAGTGAGCAACCACAG 673 AGCAGGGAAATTCAATCGTTCGCA TCGACAGTTGAATTTCCCTGCT 674 CCTAACCGAGCGCTTAGCATTTCC GGAAATGCTAAGCGCTCGGT 675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTAGGGTCGGG 676 TTGCTTAATGGTGACGCCACGGAT 677 GATGCTCGCCGTGTTTAGTTCACC CGTGAAACACACACACACACACACACACACACACACACAC	10	662	TTGCTCTTATCCTTGTCCTGGGCG	CGCCCAGGACAAGGATAAGAGCAA
665 GCTCGATTTCACGGCCCGTTGTTC 668 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 668 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 668 AACCGTTTAGGGTACATTCGCGGT ACCGCGAATGTACCCTAAACGGTT 669 TATGATCGCTCGGCTCACAGTTTG CAAACTGTGAGCCGAGCGATCATA 670 GACTTTTTGCGGAAACGTCATGGT ACCATGAGCGACGATCATA 671 TGTCGGTTATTCCACCTGCAAGGA TCCTTGAGGGTGAAAACAGTC 672 CTATGGTTTGCACTGCCGCTCGA TCGACGGGCGATGATAACCGACA 673 AGCAGGGAAATCAATCGTCGCA TCGACGGAGCGATGAAACCATAG 674 CCTAACCGAGCGCTTAGCA TGCGAACGATTGAATTTCCCTGCT 675 CCCGACCCTAACTCGCATTGCA TGCGAACGATTGAATTTCCCTGCT 676 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGACGTCAGGTTAGGG 677 GATGCTCGCCGTGATTTCACC GGAAATGCTAACCAGTAGGG 678 TCGGATGACGATTTCACC CGTGAACCATTAGCGAC 679 ATGCGGTCTACTTTCCATGACG CCGTCGAACCATTAAGCAC 679 ATGCGGTCTACTTTCCATGACG CCGTCATGAAAACTCGTCATCCGA 680 TTGCGAGGCTAAGCACACGGTAA TTTACCATGAGAAACTCGTCATCCGA 681 AACTTAATTACCGCCTCTGGCC GGCGCAGAGAAAGTAGACCCCAT 682 GTGACCGCGAACTTGTTCCACAG CTGTCGGAACAAAGTAGCCCCCAGA 683 TGCGATTACCGCTCTGGCC GGCGCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCACAG CTGTCGGAACAACATCGCGCAA 683 TGCGGATTACCGATTCGCTCTTAA TTAACACGTGGCCCCCTATCA 684 TGATAGGGGCCACGTTGATCAGA TCTGATCAACGTGCCCCCTATCA 685 TCGCTCCGTAGCATTCATCGAA TCTGATCAACGTGCCCCCTATCA 686 TGTCAGCTGATACCGATTCAACGA TCTGATCAACGTGGCCCCCTATCA 687 AGCGTGTAGCATTCACGCAC CTGCAGAAACAACTCGCCACA 688 TCACTCAGCGATTCATCGTAG TCAACACGTGGCCCCCTATCA 688 TCACTCAGCGCTTAGCGCTTCAGA TCAACACGTGGCCCCCTATCA 688 TCACTCAGCGCTTACGGCAC CTGCCGAAACCAGCTGAACAC 689 GTTCAGCTGTAACGCTTCCGCAC CTGCCCCACATAGCGCTACCAGCCGAAC 689 GTTCAGCTGTGACTCCCCTTTGA TCAACCGAGCGCAACCAGCTGAACAC 690 GTCGCATTCACGCAC CTGCCCCCCACTATCACACGCGCCACCTTAACCACGCCGACCCT 688 TCACTCAGCGCTTCCCCCCCCCCCCCCCCCCCCCCCCCC		663	TTAAGGATCAGGCGGAGCTTGCAG	CTGCAAGCTCCGCCTGATCCTTAA
666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCGTCCTCACCTCCA 668 AACCGTTTAGGGTACATTCGCGGT ACCGCGAATGTACCCTAAACCGTT 669 TATGATCGCTCGGCTCACAGTTTG CAAACTGTGAGCCGAGCGATCATA 670 GACTTTTGCGGAAACGTCATGGT ACCATGACGGTTTCCGCAAAAAGTC 671 TGTCGGTTATTCCACCTGCAAGGA TCCTTGCAGGTGGAATAACCGACA 672 CTATGGTTTGCACCTGCAAGGA TCCTTGCAGGTGGAATAACCGACA 673 AGCAGGGAAATTCAATCGTTCGCA TGCGAACGATTGAAACCATAG 674 CCTAACCGAGCGCTTAGCATTCC GGAAATGCTAAGCGCTCGGTTAGG 675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTGAGGTCGGG 676 TTGCTTAATGGTGACGCCCACGGAT ATCCGTGGGTCAGCATTAAGCAA 677 GATGCTCGCCGTGTTTAGTTCACG CGTGAACTAACACGGCGAGCATC 678 TCGGATGACGACTTCCATGACG CCGTCATGAAACACCGCGAGCATC 679 ATGCGGTCACTTTCCTCATGACG CCGTCATGGAAACTCGTCATCCGA 679 ATGCGGTCACTTTCTCCATGACG CCGTCATGGAAACTCGTCATCCGA 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGGCTCACCATTAAGTT 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCAGACG CTGTCGGAACAAGTAGCACCGCAT 683 TGCGGATTACCGTCTTAA TTAACAGCGGCGAACAAGTTCGCGCA 684 TGATAAGGGGGCCACGTTGATCAGA TCTGATCAACGGGGTAATTAAGTT 37 TAGCGTTCGCTCTTAA TTAACAGCGGAACAAGTTCGCGCA 684 TGATAAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACAGAGGGCAACCGGTAACCAGCGAACAGTTCGCACAG 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCATCACGGAGCACA 687 AGCGGCCAAGTCACCGTTTGAA TCAAACGGAGGCATCACAGCGCACAA 688 TCACTCAGCGGTTCACCGTTTGAA TCAAACGGAGCCACCCCCTATCA 688 TCACTCAGCGCTTCACGCCC GTCACCAACAGCTCACAGCGCACAA 689 GTTTGCGCTATCATCGGCC GTCACACAGCGCTACCAGCTGACAA 689 GTTTGCGCTATAGTGGGCAC GTGCCGTAACCAGCGCTACCAGCTGACAA 689 GTTTGCGCTATAGTGGGCAC GTGCCGTAACCAGCGCTAACAG 689 GTCCCATTAGTGGGGGAC GTCCCCCACTATAGCGAAC 689 GTCCCATTAGTGGGGGAC GTGCCGCACCTAATCA 689 AGCGGCATTCTGCACGGGTCCCGTTCGC GGCCACCCTAATCA 690 GTCGCATTCTGCACGGCTCCGCTTCGC GGCCACCCTAATCA 691 TGATTAGGTGCGGTCCCGTTCGC GGCCACCCCAACGCCCCACCCTAATCA 692 AAGGGACCTTGGGTGCCGGACGCCGCCCCACCCTAATCA 693 AAGGGACCTTGGGTGCCGGACGCGACCCTAACCAGCCCCCTAATCA 694 TGATTAGGTGCGGGTCCCGTAGTCC GGCCACCCCAAGGCCCCCTAATCA		664	CGCGACTAAGGTGCTGCAACTCGA	TCGAGTTGCAGCACCTTAGTCGCG
15 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCACCTCCA 668 AACCGTTTAGGGTACATTCGCGGT ACCGCGAATGTACCCTAAACGGTT 669 TATGATCGCTCGGCTCACAGTTTG CAAACTGTGAGCCGAGCGATCATA 670 GACTTTTTGCGGAAACGTCATGGT ACCATGACGGTTTCCGCAAAAAGTC 671 TGTCGGTTATTCCACCTGCAAGGA TCCTTGCAGGTGGAATAACCGACA 672 CTATGGTTTGCACTGCGCCGTCGA TCGACGGCGCAGTGCAAACACTAG 673 AGCAGGGAAATTCAATCGTTCGCA TCGACGGCGCAGTGCAAACACTAG 674 CCTAACCGAGCGCTTAGCATTTCC GGAAATGCTAAGCGTCGGC 675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTAGGGTCGGG 676 TTGCTTAATGGTGACGCCACGGAT ATCCGTGGGGTCACCATTAAGCAA 677 GATGCTCGCCGTGTTTAGTTCACG CGTGAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACG CCCGATCGAGAACTCTCCGA 679 ATGCGGTCTACTTTCTCATCAGCG CCCGATCGAGAAACTCGTCATCCGA 679 ATGCGAGGCTAACACGGTAAA TTTACCGTGTGCTTAGCCTCCGAA 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTCTTAGCCTCCGCAA 681 AACTTAATTACCGCCTCTGCGCC GCCCCAACAGGGCGATAATTAAGTT 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCCGACAG CTGTCGGAACAAGTTCGCGCAC 684 TGATAGGGGGCCACGTTGATCAGA TCTAACACAGGGCGACTCCACA 685 TCGCTCCGTAGCGTTTCCATCAGA TCTAACACACGTGGCCCCCTATCA 686 TGTCAGCTGGTAGCCTCTTAA TTAACAGCGAATCGGTAATCCGCA 687 AGCGTCACGATTCACTCTTAA TCAACCGTGGCCCCCCTATCA 688 TCACTCAGCGATTCATCGTTAA TCAACCGAGGCCGCACCCCCTATCA 689 TGCCACCGGAACTTGATCAGA TCTACACACGTGGCCCCCCTATCA 688 TCACTCAGCGCTTCACGCCC GTCCCACTAAGCGTCACCACAGCTGACA 689 GTTTGCGCTTTAACGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 689 GTTTGCGCTATAGTGGGGCAC GTGCCCCACTATAGCCCCCCCATTAACACGGGACCGCTTACACGGAGCCACCTTAACACGGCCCCCTATCA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCACAGCGCTAACACGGCACCCTAATCA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCCACTATAGCCAACAC 690 GTCGCATTCTGCCCGGGCCC GGCGCAAGCCAGTCAAGAGCCACCGCCCAACC 691 TGATTAGGTGCGGCCCCGTAGTCC GGACCACCCAAGGCCCCTTATCA 692 AAGGGACCTTGGGTGCCCGGAAGCCAGTCCACCCAAAGCCCCTTATCA 693 AAGGGACCTTGGGGTCCCGTAGTCC GGACCCCCCACTAATCA 694 AAGGGACCTTGGGGTCCCGTAGTCC GGACCCCCCACCTAATCA 694 AAGGGACCTTGGGGGCGCACCTTAACCGCACCCCAAGGCCCCCTAATCACACG		665	GCTCGATTTCACGGCCCGTTGTTC	GAACAACGGGCCGTGAAATCGAGC
668 AACCGTITAGGGTACATTCGCGGT ACCGCGAATGTACCCTAAACGGTT 669 TATGATCGCTCGGCTCACAGTTTG CAAACTGTGAGCCGAGCGATCATA 670 GACTTTTTGCGGAAACGTCATGGT ACCATGAGCTTTCCGCAAAAAGTC 671 TGTCGGTTATTCCACCTGCAAGGA TCCTTGCAGGTGAATAACCGACA 672 CTATGGTTTGCACTGCGCCGTCGA TCGACGGCGCAGTGCAAACCATAG 673 AGCAGGGAAATTCAATCGTTCGCA TGCGAACGATTGAATTTCCCTGCT 674 CCTAACCGAGCGCTTAGCATTTCC GGAAATGCTAAGCGTCAGGTAGG 675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTAGGGTCGGG 676 TTGCTTAATGGTGACGCCACGGAT ATCCGTGGCGTCACATTAAGCAA 677 GATGCTCGCCGTGTTTAGTTCACG CTGAAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACGG CCGTCATGGAAACTCGCAT 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGAAAACTACGCAT 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGC CGCCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTGCCGCA 683 TGCGGATTACCGATTCCGTCTTAA 684 TGATAGGGGGCCACGTTAAA TTAACGGCGAATTCGCGA 685 TCGCTCCGTAGCGATCTTAA TTAAGAGCGAATCGGTAACTCAC 686 TGTCAGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTGCCGCA 687 AGCGTCACGTTTACCTCTTTAA TTAAGAGCGAATCGGTAACCCA 688 TGCACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGCA 688 TGCACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGCAC 689 TGTCAGCTGGTAGCCTCCGTTTAA TCAAACGGAAGCACACGTTACCGA 680 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGCGAACCGCTCACCA 681 TCACTCAGCGATTCACGCAC GTGCCGTAAGCGTCACCAGCGCACCTAACA 682 GTGCCGCAACTGTTCACGCAC GTGCCGTAAGCGTCACCAGCTGACA 683 TGCGCTCCGTAGCGATTCACGCAC GTGCCGTAAGCGTCACCAGCTGACA 684 TGATTAGGGGGCCACGTTTACGCAC GTGCCGTAAGCGTCACCAGCTGACA 685 TCGCTCCGTAGCGCTTCACGCAC GTGCCGTAAGCGTCACCAGCTGACA 686 TGTCAGCTGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCGCTAACA 687 AGCGTCGCATTACGGCAC GTGCCGTAAGCGTCACACGCTCACAC 688 TCACTCAGCGCTTACGGCAC GTGCCCCCACTATAGCGCAAC 689 GTTTGCGCTATAGTGGGGGCCCCCTACCCACTATAGCGCACC 689 GTTTGCGCATTCGCC GCGAAGCCAGTCACCAGCGCTAACC 689 GTTTGCGCATTCGCC GGCGAAGCCAGTCACCACCTAATCA 689 GTTTGCGCATTCGCC GGCGAAGCCAGTCACCACCCACCTAATCA 689 GTTTGCGCATTCGGCCCCGAAGCCGACCCACCTAATCA 689 AGGGACCTTGGGTGCCGCAGAACCCAGGCCCCCCCACTAATCA 689 AGGGACCTTGGGTGCCGCAGAACCCAGGCCCCCCCACCTAATCA 690 GTCGCATTCGGCGGGCACGAACCCAGGCCCCCCCCACCTAATCA		666	AGCAGAGTGCGTTGCAGAGGCTAA	TTAGCCTCTGCAACGCACTCTGCT
669 TATGATCGCTCGGCTCACAGTTTG CAAACTGTGAGCCGAGCGATCATA 670 GACTTTTTGCGGAAACGTCATGGT ACCATGACGTTTCCGCAAAAAGTC 671 TGTCGGTTATTCCACCTGCAAGGA TCCTTGCAGGTGGAATAACCGACA 672 CTATGGTTTGCACTGCGCCGTCGA TCGACGGCGCAGTGCAAACCATAG 673 AGCAGGGAAATTCAATCGTTCGCA TGCGAACGATTGAATTTCCCTGCT 674 CCTAACCGAGCGCTTAGCATTTCC GGAAATGCTAAGCGCTCGGTTAGG 675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTAGGGTCGGG 676 TTGCTTAATGGTGACGCCACGGAT ATCCGTGCGACCACTTAAGCAA 25 677 GATGCTCGCCGTGTTTAGTTCACG CGTGAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACG CCGTCATGGAAACTCGTCATCCGA 679 ATGCGGTCTACTTTCTCGATCGGG CCCCGATCGAGAAACTCGTCATCCGA 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGATCACCACACGGTAAA TTAAGAGCGAACAAGTTCGCGCACACGGTACACACGGTACACACGGTACACACGGTAACACACGGGCAACACGTTCACCGAA 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAACAAGTTCGCGCACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGAGCGCACCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACCGCTTACGGCAC GTGCCGTAAGCGTCACACACGGTGACACACGGTGACACACGGTGACACACGGTGACACACGGTGACACACGGTGACACACGGTGACACACGGGAGCGACCGAC	15	667	TGGAGGTGAGGACGACGTGCACTA	TAGTGCACGTCGTCCTCCA
670 GACTTTTTGCGGAAACGTCATGGT ACCATGACGTTTCCGCAAAAAGTC 671 TGTCGGTTATTCCACCTGCAAGGA TCCTTGCAGGTGGAATAACCGACA 672 CTATGGTTTGCACTGCGCCGTCGA TCGACGGCGCAGTGCAAACCATAG 673 AGCAGGGAAATTCAATCGTTCGCA TGCGAACGATTGAATTTCCCTGCT 674 CCTAACCGAGCGCTTAGCATTTCC GGAAATGCTAAGCGCTCGGTTAGG 675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTAGGGTCGGG 676 TTGCTTAATGGTGACGCCACGGAT ATCCGTGGCGTCACCATTAAGCAA 25 677 GATGCTCGCCGTGTTTAGTTCACG CGTGAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACGG CCGTCAACTAGACACACGAT 679 ATGCGGTCTACTTTCTCGATCGGG CCCGATCGAGAAACTCGTCATCCGA 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGCCGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGATCAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAACCGGCGACACA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 688 TCACTCAGCGCTTACGGCAC GTGCCGTAACCAGCGCTGACA 689 GTTTGCGCATGACGCTTCCGCTA TCAGCGCAGCCCCTATCA 689 GTTTGCGCATTCATCGCC GGCGAAGCCACTCACACCGCAAC 690 GTCGCATTCTGCACTGCCC GGCGAAGCCACTCACACACGCGCAAAC 691 TGATTAGGTGCGCTCCGTTTGCC GGCGAACCCACTAATCA 692 AAGGGACCTTGGCTCCCGTAGTCC GGACTACCCCCACTAATCA		668	AACCGTTTAGGGTACATTCGCGGT	ACCGCGAATGTACCCTAAACGGTT
671 TGTCGGTTATTCCACCTGCAAGGA TCCTTGCAGGTGGAATAACCGACA 672 CTATGGTTTGCACTGCGCCGTCGA TCGACGGCGCAGTGCAAACCATAG 673 AGCAGGGAAATTCAATCGTTCGCA TGCGAACGATTGAATTTCCCTGCT 674 CCTAACCGACGCTTAGCATTTCC GGAAATGCTAAGCGCTCGGTTAGG 675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTAGGGTCGGG 676 TTGCTTAATGGTGACGCCACGGAT ATCCGTGGCGTCACCATTAAGCAA 677 GATGCTCGCCGTGTTTAGTTCACG CGTGAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACG CCGTCATGAAACTCGTCATCCGA 679 ATGCGGTCTACTTTCTCGATCGGG CCCGATCGAGAAACTCGTCATCCGA 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAACTCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCATCAG CTACCGATGAACACGTGACACA 686 TGTCAGCTGGAGCATCACTCGTAGCAG CTGCACAGAGCCGCACCTACA 687 AGCGTCGCATGACCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 688 TCACTCAGCGCTTACGCAC GTGCCCTAACACGTCACCACGGAGCGCAGACCAGCGCACCTTACACACGTGACCACCACCACACACA		669	TATGATCGCTCGGCTCACAGTTTG	CAAACTGTGAGCCGAGCGATCATA
20 672 CTATGGTTTGCACTGCGCCGTCGA TCGACGGCGCAGTGCAAACCATAG 673 AGCAGGGAAATTCAATCGTTCGCA TGCGAACGATTGAATTTCCCTGCT 674 CCTAACCGAGCGCTTAGCATTTCC GGAAATGCTAAGCGCTCGGTTAGG 675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTAGGGTCGGG 676 TTGCTTAATGGTGACGCCACGGAT ATCCGTGGCGTCACCATTAAGCAA 25 677 GATGCTCGCGTGTTTAGTTCACG CGTGAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACG CCGTCATGGAAACTCGTCATCCGA 679 ATGCGGTCTACTTTCTCGATCGG CCCGATCGAAAACTCGTCATCCGA 680 TTGCGAGCACACAGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCAACTTGTTCCGACAG CTGTCGGAACACAGGTAATCAGC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTCACC 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGAGAGCGA 35 687 AGCGTCGCATGACCCTCTTTAA TCAACCGAGGCCTACCACCTGACA 688 TCACTCAGCGATTCATCGCACA GTGCCGTAACCACTGACA 689 GTTTGCGCTTTACGCCC GTCCGTAAGCGTCACACCGCTTACA 689 GTTTGCGCTATACTGCCTCTGA 689 GTTTGCGCTATACTGCCCTCGA 689 GTTTGCGCTATACTGCCCCGAACCCCCACTATCA 689 GTTTGCGCTATACTGCCCCGAACCCCCCCACTATCACCGCAACC 690 GTCGCATTCTCGACTGCCC GGCGAAGCCACTGCACAC 691 TGATTAGGTGCGCCCCCTAGTCC GGCGAACCCACCTAATCA 692 AAGGGACCTTGGGTGACGCCCCCCCCACTAATCA 693 TCACTCAGGTGCCCCCCACTAATCA		670	GACTTTTTGCGGAAACGTCATGGT	ACCATGACGTTTCCGCAAAAAGTC
673 AGCAGGGAAATTCAATCGTTCGCA TGCGAACGATTGAATTTCCCTGCT 674 CCTAACCGAGCGCTTAGCATTTCC GGAAATGCTAAGCGCTCGGTTAGG 675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTAGGGCGCGGG 676 TTGCTTAATGGTGACGCCACGGAT ATCCGTGGCGTCACCATTAAGCAA 25 677 GATGCTCGCCGTGTTTAGTTCACG CGTGAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACG CCGTCATGGAAACTCGTCATCCGA 679 ATGCGGTCTACTTTCTCGATCGG CCCGATCGAGAAAGTAGACCGCAT 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAACCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACCGCTTCACGCAC GTGCCGTAAGCGTCACCAGCTGACA 688 TCACTCAGCGCTTCACGCAC GTGCCGTAAGCGTCACCAGCTGACA 689 GTTTGCGCTATAGTGGCGCAC GTGCCGTAAGCGTCACACCGCTGACA 689 GTTTGCGCTATAGTGGGGACCGT ACGGCCCCCACAACC 690 GTCGCATTCTGCACTGCCTCGC GGCGAAGCCACTTAAGCGCAAAC 691 TGATTAGGTGCGGTCCCGTTTGCC GGCGCAACCCAAGTCCAACCACCGCACCCTAATCA 692 AAGGGACCTTGGGTGACGGCGAA TCTCGCCGTCACCCAAGGTCCCTT		671	TGTCGGTTATTCCACCTGCAAGGA	TCCTTGCAGGTGGAATAACCGACA
674 CCTAACCGAGCGCTTAGCATTTCC GGAAATGCTAAGCGCTCGGTTAGG 675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTAGGGTCGGG 676 TTGCTTAATGGTGACGCCACGGAT ATCCGTGGCGTCACCATTAAGCAA 677 GATGCTCGCCGTGTTTAGTTCACG CGTGAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACGG CCGTCATGGAAACTCGTCATCCGA 679 ATGCGGTCTACTTTCTCGATCGGG CCCGATCGAGAAAGTAGACCGCAT 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCGTCTTAA TTAAGAGCGAACAGTTCGCGGTCAC 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGAG 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACGCTTCACGCAC GTGCCGTAAGCGTCACCAGCTGACA 688 TCACTCAGCGCTTCACGCAC GTGCCGTAAGCGTCACAGCGT 689 GTTTGCGCTTTACGGCAC GTGCCGTCACAGCGCTCACA 689 GTTTGCGCTTTACGGCAC GTGCCCCCCACTATAGCGCAAC 690 GTCGCATTCTGCCTCGT ACGGCACCGCCCCCCACTATCAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACCGGACCCCCCACTATCA 692 AAGGGACCTTGGGTGACGCCGCAGAGCCGACCCCCCACTATCA 692 AAGGGACCTTGGGTGACGCCGAATCCCCCCCACTAATCA 663 TGATTAGGTGCGGTCCCCGTAGTCC GGACTACCCAAGGTCCCTT	20	672	CTATGGTTTGCACTGCGCCGTCGA	TCGACGCGCAGTGCAAACCATAG
675 CCCGACCCTAACTCGCATTGAATA TATTCAATGCGAGTTAGGGTCGGG 676 TTGCTTAATGGTGACGCCACGGAT ATCCGTGGCGTCACCATTAAGCAA 25 677 GATGCTCGCCGTGTTTAGTTCACG CGTGAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACGG CCGTCATGGAAACTCGTCATCCGA 679 ATGCGGTCTACTTTCTCGATCGGG CCCGATCGAGAAAGTAGACCGCAT 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 35 687 AGCGTCGCATGACGCTTACGCAC GTGCCGTAAGCGTCACACGCT 688 TCACTCAGCGCTTGACCGCAC GTGCCGTACAGCGTCACAGCGT 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCACAGCGCTGAGTGA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAAC 691 TGATTAGGTGCGTCCCGTAGTCC GGACTACCGGACCGACCTAATCA 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCCCAACGTCCCATATCA		673	AGCAGGGAAATTCAATCGTTCGCA	TGCGAACGATTGAATTTCCCTGCT
25 676 TTGCTTAATGGTGACGCCACGGAT ATCCGTGGCGTCACCATTAAGCAA 677 GATGCTCGCCGTGTTTAGTTCACG CGTGAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACGG CCGTCATGGAAACTCGTCATCCGA 679 ATGCGGTCTACTTTCTCGATCGGG CCCGATCGAGAAAGTAGACCGCAT 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACCGT 688 TCACTCAGCGCTGTGACTGCCTGA TCAGGCAGTCACAGCGCTGAGAAC 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCACAACCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCACTATAGCGCAAAC 691 TGATTAGGTGCGTCCCGTAGTCC GGACTACCGGACCGCCTAATCA 692 AAGGGACCTTGGGTGACGCCAGAA TCTCGCCGTCACCCAAGGTCCCTTATCA 692 AAGGGACCTTGGGTGACGCCAACA TCTCGCCCGTCACCAAGGTCCCTTATCA 692 AAGGGACCTTGGGTGACGCCAAGA TCTCGCCCGACCCCAACGTCCCTTATCA 692 AAGGGACCTTGGGTGACGCCAACA TCTCGCCCGTCACCCAAGGTCCCTTATCA 692 AAGGGACCTTGGGTGACGCCAACA TCTCGCCCGTCACCCAAGGTCCCTT		674	CCTAACCGAGCGCTTAGCATTTCC	GGAAATGCTAAGCGCTCGGTTAGG
25 677 GATGCTCGCCGTGTTTAGTTCACG CGTGAACTAAACACGGCGAGCATC 678 TCGGATGACGAGTTTCCATGACGG CCGTCATGGAAACTCGTCATCCGA 679 ATGCGGTCTACTTTCTCGATCGGG CCCGATCGAGAAAGTAGACCGCAT 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCACA 688 TCACTCAGCGCTTGACTGCCTCGA TCAGGCAGTCACAGCGCTGAGTGA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTTCCCCTTAGTCC GGACTACCCCAAGGTCCCTTAATCA 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		675	CCCGACCCTAACTCGCATTGAATA	TATTCAATGCGAGTTAGGGTCGGG
678 TCGGATGACGAGTTTCCATGACGG CCGTCATGGAAACTCGTCATCCGA 679 ATGCGGTCTACTTTCTCGATCGGG CCCGATCGAGAAAGTAGACCGCAT 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACGCT 688 TCACTCAGCGCTTGACTGCTGA TCAGGCAGTCACAGCGCTGAGTA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACCGGACCCCTAATCA 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		676	TTGCTTAATGGTGACGCCACGGAT	ATCCGTGGCGTCACCATTAAGCAA
679 ATGCGGTCTACTTTCTCGATCGGG CCCGATCGAGAAAGTAGACCGCAT 680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACGCT 688 TCACTCAGCGCTGACTGCCTGA TCAGGCAGTCACAGCGCTGAGTA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACCGAGCCCCTAATCA 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGAAGGTCCCTT	25	677	GATGCTCGCCGTGTTTAGTTCACG	CGTGAACTAAACACGGCGAGCATC
680 TTGCGAGGCTAAGCACACGGTAAA TTTACCGTGTGCTTAGCCTCGCAA 681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGGCGGTAATTAAGTT 30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACGCT 688 TCACTCAGCGCTTGACGCAC GTGCCGTAAGCGTCATGCGACGCT 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACGGGACCGCACCTAATCA 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		678	TCGGATGACGAGTTTCCATGACGG	CCGTCATGGAAACTCGTCATCCGA
681 AACTTAATTACCGCCTCTGGCGCC GGCGCCAGAGGCGGTAATTAAGTT 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACGCT 688 TCACTCAGCGCTGTGACTGCCTGA TCAGGCAGTCACAGCGCTGAGTGA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACCGGACCCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		679	ATGCGGTCTACTTTCTCGATCGGG	CCCGATCGAGAAAGTAGACCGCAT
30 682 GTGACCGCGAACTTGTTCCGACAG CTGTCGGAACAAGTTCGCGGTCAC 683 TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACGCT 688 TCACTCAGCGCTGTGACTGCCTGA TCAGGCAGTCACAGCGCTGAGTGA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACCGGACCGCACCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		680	TTGCGAGGCTAAGCACACGGTAAA	TTTACCGTGTGCTTAGCCTCGCAA
TGCGGATTACCGATTCGCTCTTAA TTAAGAGCGAATCGGTAATCCGCA 684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACGCT 688 TCACTCAGCGCTGTGACTGCCTGA TCAGGCAGTCACAGCGCTGAGTGA 689 GTTTGCGCTATAGTGGGGGGACCGT ACGGTCCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACGGGACCGCACCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		681	AACTTAATTACCGCCTCTGGCGCC	GGCGCCAGAGGCGGTAATTAAGTT
684 TGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 35 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACGCT 688 TCACTCAGCGCTGTGACTGCCTGA TCAGGCAGTCACAGCGCTGAGTGA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACGGGACCGCACCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT	30	682	GTGACCGCGAACTTGTTCCGACAG	CTGTCGGAACAAGTTCGCGGTCAC
685 TCGCTCCGTAGCGATTCATCGTAG CTACGATGAATCGCTACGGAGCGA 686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 35 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACGCT 688 TCACTCAGCGCTGTGACTGCCTGA TCAGGCAGTCACAGCGCTGAGTGA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACGGGACCGCACCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		683	TGCGGATTACCGATTCGCTCTTAA	TTAAGAGCGAATCGGTAATCCGCA
686 TGTCAGCTGGTAGCCTCCGTTTGA TCAAACGGAGGCTACCAGCTGACA 687 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACGCT 688 TCACTCAGCGCTGTGACTGCCTGA TCAGGCAGTCACAGCGCTGAGTGA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACGGGACCGCACCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		684	TGATAGGGGCCACGTTGATCAGA	TCTGATCAACGTGGCCCCCTATCA
35 AGCGTCGCATGACGCTTACGGCAC GTGCCGTAAGCGTCATGCGACGCT 688 TCACTCAGCGCTGTGACTGCCTGA TCAGGCAGTCACAGCGCTGAGTGA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACGGGACCGCACCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		685	TCGCTCCGTAGCGATTCATCGTAG	CTACGATGAATCGCTACGGAGCGA
688 TCACTCAGCGCTGTGACTGCCTGA TCAGGCAGTCACAGCGCTGAGTGA 689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACGGGACCGCACCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		686	TGTCAGCTGGTAGCCTCCGTTTGA	TCAAACGGAGGCTACCAGCTGACA
689 GTTTGCGCTATAGTGGGGGACCGT ACGGTCCCCACTATAGCGCAAAC 690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACGGGACCGCACCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT	35	687	AGCGTCGCATGACGCTTACGGCAC	GTGCCGTAAGCGTCATGCGACGCT
690 GTCGCATTCTGCACTGGCTTCGCC GGCGAAGCCAGTGCAGAATGCGAC 691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACGGGACCGCACCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		688	TCACTCAGCGCTGTGACTGCCTGA	TCAGGCAGTCACAGCGCTGAGTGA
691 TGATTAGGTGCGGTCCCGTAGTCC GGACTACGGGACCGCACCTAATCA 40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		689	GTTTGCGCTATAGTGGGGGACCGT	ACGGTCCCCACTATAGCGCAAAC
40 692 AAGGGACCTTGGGTGACGGCGAGA TCTCGCCGTCACCCAAGGTCCCTT		690	GTCGCATTCTGCACTGGCTTCGCC	GGCGAAGCCAGTGCAGAATGCGAC
		691	TGATTAGGTGCGGTCCCGTAGTCC	GGACTACGGGACCGCACCTAATCA
693 TCAAATGGCCACCGCGTGTCATTC GAATGACACGCGGTGGCCATTTGA	40	692	AAGGACCTTGGGTGACGGCGAGA	TCTCGCCGTCACCCAAGGTCCCTT
		693	TCAAATGGCCACCGCGTGTCATTC	GAATGACACGCGGTGGCCATTTGA

	694	CTCCGACGACCAATAAATAGCCGC	GCGGCTATTTATTGGTCGTCGGAG
	695	GGCTATTCCCGTAGAGAGCGTCCA	TGGACGCTCTCTACGGGAATAGCC
	696	TGGATAACCTCTCGGTCCATCCAC	GTGGATGGACCGAGAGGTTATCCA
	697	GACCGCTGTACGGGAGTGTGCCTT	AAGGCACACTCCCGTACAGCGGTC
5	698	GCCACAGAGTTTTAGCAGGGACCC	GGGTCCCTGCTAAAACTCTGTGGC
	699	CCCACGCTTTCCGACCACTGACCT	AGGTCAGTGGTCGGAAAGCGTGGG
	700	CATTGACACAATGCGGGGACTGAT	ATCAGTCCCCGCATTGTGTCAATG
	701	AGCCACTCGACAGGGTTCCAAAGC	GCTTTGGAACCCTGTCGAGTGGCT
	702	CAGGATGAGCAAAGCGACTCTCCA	TGGAGAGTCGCTTTGCTCATCCTG
10	703	CAAGGTATGGTCTGGGGCCTAAGC	GCTTAGGCCCCAGACCATACCTTG
	704	GGTGTTCGGCCTAAACTCTTTCGG	CCGAAAGAGTTTAGGCCGAACACC
	705	TTTAGTCGGACCCTGTGGCAATTC	GAATTGCCACAGGGTCCGACTAAA
	706	CACACGTTTCCGACCAGCCTGAAC	GTTCAGGCTGGTCGGAAACGTGTG
	707	CTGGACGAACTGGCTTCCTCGTAC	GTACGAGGAAGCCAGTTCGTCCAG
15	708	TTCACAATCCGCCGAAAACTGACC	GGTCAGTTTTCGGCGGATTGTGAA
	709	AACAGGATATCCGCGATCACGACA	TGTCGTGATCGCGGATATCCTGTT
	710	TACGTCGGATCCATTGCGCCGAGT	ACTCGGCGCAATGGATCCGACGTA
	711	CATGGATCTCTCGGTTTGATCGCC	GGCGATCAAACCGAGAGATCCATG
	712	AGCCAGGCGCGTATATACGCTCGG	CCGAGCGTATATACGCGCCTGGCT
20	713	ATTTGGCACGTGTCGTGCCATGTT	AACATGGCACGACACGTGCCAAAT
	714	CCGCGTTGCACCACTTTGAGGTGC	GCACCTCAAAGTGGTGCAACGCGG
	715	TTGGACGTGACAAGCATGGCGCTC	GAGCGCCATGCTTGTCACGTCCAA
	716	CTGAATCGCGCAAGTAAATGGGGG	CCCCATTTACTTGCGCGATTCAG
	717	GATAAGGTCCACCAGATTGCGCGC	GCGCGCAATCTGGTGGACCTTATC
25	718	CTAACAATTGCCAACCGGGACGGC	GCCGTCCCGGTTGGCAATTGTTAG
	719	GĢTAACCTGGGTGCTTGCAGGTTA	TAACCTGCAAGCACCCAGGTTACC
	720	ATCGGAGCCACCATTCGCATTGGG	CCCAATGCGAATGGTGGCTCCGAT
	721	GTGAACTGGCTTGCCCCAGGATTA	TAATCCTGGGGCAAGCCAGTTCAC
	722	AGGCGATAGCATGGTCCCATATGA	TCATATGGGACCATGCTATCGCCT
30	723	AACGGTATCGTGGCTAATGCACGA	TCGTGCATTAGCCACGATACCGTT
	724	AGTAGTGGTCCTCCAGATCGGCAA	TTGCCGATCTGGAGGACCACTACT
	725	CCGTTGAATTGGACGGGAGGTTAG	CTAACCTCCCGTCCAATTCAACGG
	726	GCATAAGTGCGGCATCGCGAAGGG	CCCTTCGCGATGCCGCACTTATGC
	727	CGACAAGATGCAGCTGCTACATGC	GCATGTAGCAGCTGCATCTTGTCG
35	728	TCGCAGTGATTCCCGACCGATAAG	CTTATCGGTCGGGAATCACTGCGA
	729	CAAGGCGAGTCCACTCGAGGGGAC	GTCCCCTCGAGTGGACTCGCCTTG
	730	GCAACTTGCACGGCATAAGTGGCC	GGCCACTTATGCCGTGCAAGTTGC
	731	TCCGAGCTTGACGTTCGCGACGTC	GACGTCGCGAACGTCAAGCTCGGA
	732	AGCGCTGGGCTGTGCCATCTC	GAGATGGCAGCACAGCCCAGCGCT
40	733	TTCATGTCGCTGAGTAACCCTCGC	GCGAGGGTTACTCAGCGACATGAA
	734	CGAACCGCTAATGCCCATTGTCAG	CTGACAATGGGCATTAGCGGTTCG

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	735	CACGGAAGGTGGGACAAATCGCCG	CGGCGATTTGTCCCACCTTCCGTG
	736	CACAGATGGAGACAAACGCGCCTT	AAGGCGCGTTTGTCTCCATCTGTG
	737	TTTTCGCAACTCGCTCCATAACCC	GGGTTATGGAGCGAGTTGCGAAAA
	738	ACGTTACGTTTCCGGCGCCTCTAA	TTAGAGGCGCCGGAAACGTAACGT
5	739	TATCGGATTGCGTGGGTTTCAATC	GATTGAAACCCACGCAATCCGATA
	740	CTTCCACAATTGTCTGCGACGCAC	GTGCGTCGCAGACAATTGTGGAAG
	741	TGCACAAAGGTATGGCTGTCCGGC	GCCGGACAGCCATACCTTTGTGCA
	742	TCCGATGCCAGTCCCATCTTAAGA	TCTTAAGATGGGACTGGCATCGGA
	743	CTGAAACCGTGCGAATCGAGGTGA	TCACCTCGATTCGCACGGTTTCAG
10	744	CGGTGTTCCGCGTGTCGAAAAAAT	ATTTTTCGACACGCGGAACACCG
	745	TCTAGCAGGCCTTTTGAATCGCCA	TGGCGATTCAAAAGGCCTGCTAGA
	746	GAGTCACCTCTGAGACGGACGCCA	TGGCGTCCGTCTCAGAGGTGACTC
	747	TCTTCTGTCATCCTGCAGCAGCAT	ATGCTGCTGCAGGATGACAGAAGA
	748	GCGGATGAAACCTGAAAGGGGCCT	AGGCCCTTTCAGGTTTCATCCGC
.15	749	GGGGCCCAAACTGGTATCAAGCC	GGCTTGATACCAGTTTGGGGCCCC
ı	750	GCATTGGCTTCGGATTCTCCTACA	TGTAGGAGAATCCGAAGCCAATGC
	751	AGGCGGCCCAACTGTGAGGTCTTG	CAAGACCTCACAGTTGGGCCGCCT
	752	ACACCATGTGCTCCGCGCTGCAGT	ACTGCAGCGCGGAGCACATGGTGT
	753	ACGATGAACATGAATCGGGAGTCG	CGACTCCCGATTCATGTTCATCGT
20	754	CTGCATCCCTGTAGCAGCGCTCCG	CGGAGCGCTGCTACAGGGATGCAG
	755	GTGCCGTATTTCGACCTGTGCGTT	AACGCACAGGTCGAAATACGGCAC
	756	GCAGTGCGCACTTCAGTTCAAAAG	CTTTTGAACTGAAGTGCGCACTGC
	757	GCGATTTTAAGCGATGCCTTGACG	CGTCAAGGCATCGCTTAAAATCGC
	758	TAGGTGACCTAGGCTTGCTTGCGG	CCGCAAGCAAGCCTAGGTCACCTA
25	759	CTGGATACCTTGCCTGTGCGGCGC	GCGCCGCACAGGCAAGGTATCCAG
•	760	CCCCTTACGGCTCGTCGTCTATGC	GCATAGACGACGAGCCGTAAGGGG
	761	GCGCTTGCCCGATGCGATGCATTA	TAATGCATCGCATCGGGCAAGCGC
	762	TTTCTGTAAGCGGCCTGGGGTTCA	TGAACCCCAGGCCGCTTACAGAAA
	763	GGCTGAGGTGAGCGGTAAGGATGA	TCATCCTTACCGCTCACCTCAGCC
30	764	TCTTGGCCTCCCCGATCTAATTTG	CAAATTAGATCGGGGAGGCCAAGA
	765	GGAGGTAACGCCGTGTACGTAGGA	TCCTACGTACACGGCGTTACCTCC
	766	GTAATCCATTTGTGGCTGCGTCAA	TTGACGCAGCCACAAATGGATTAC
	767	CAAACCCATTCCAGCAGACGCCTG	CAGGCGTCTGCTGGAATGGGTTTG
	768	TAGGAGGAATTTGGCATGCGGGCG	CGCCCGCATGCCAAATTCCTCCTA
35	769	ATAGGTAGGATGTGCCCGGCGTTG	CAACGCCGGGCACATCCTACCTAT
	770	GCAAGTGCTTAGCTCGTCAGCCTC	GAGGCTGACGAGCTAAGCACTTGC
	771	CTGGCTGTGTCGCATCTCGTTAAC	GTTAACGAGATGCGACACAGCCAG
	772	CTAACGTCGTCTCGCGCAATCACT	AGTGATTGCGCGAGACGACGTTAG
	773	TTTTCATAAACGTTGTCCCCGAGC	GCTCGGGGACAACGTTTATGAAAA
40	774	AGCAGGAGGACGAACCTCCGCTCC	GGAGCGGAGGTTCGTCCTCCTGCT
	775	TTCAAGCACCATCGTGCAATCCAA	TTGGATTGCACGATGGTGCTTGAA
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776 AGCGTCGCCAGTGATCGCTAGTGG CCACTAGCGATCACTGGCGACGCT 777 TACATTCCCTCGCTGGGCTT 778 CGCTTCGCGTATTCAGTAGCGGTT 778 CGCTTCGCGTATTCAGTAGCGGTT 779 TCGGACGCGTCGACACTCATTATA 778 TCGGACGCGTCGACACTCATTATA 778 TACATTCCCTGGCGTT 779 TCGGACGCGTCCAGCT 779 TCGGACGCGTCCAGCT 779 TCGGACGCGTCCAGCT 781 TTGAATTGCCAGCCCTGAAAGCC 781 TTGAATTGCCTTGATGCGTCGGT 782 AGTTTTCGCTTGATGCGTCGGT 783 GTTTCATAGGCCAGCCCTGAAAGCC 784 GGAGCGAAGACTTCATA 785 ATTGGCCAGGCCAGCGTGCTAAA 786 GGAGCGAAGACTTCGTCTGCCCAA 786 TGATCCATCGCTCGCTAA 786 TGATCCATCGACGCTTAAACT 786 TGATCCATCGAAGCCT 786 TGATCCATCGAAGCCT 786 TGATCCATCGCTCGCTAA 787 GCACACAGTTGTTTTCCAT 788 CTGGCGGGGAGTGATAACTTCCAT 789 ATCTCCATCGAAGCTTTCCAT 789 ATCTCCATCGAAGCTTCTCCCCAA 789 ATCTCCATCGAAGCTGCTCCG 789 ATCTCCATGCGATGCTTTCAGCCCAGCATCAGCACACACA				
778 CGCTTCGCGTATTCAGTAGCGGTT 779 TCGGACGCGTCGACACTCATTATA TATAATGAGTGTCGACGCGTCCGA 779 TCGGACGCGTCGACACTCATTATA TATAATGAGTGTCGACGCGTCCGA 780 TCTGACAGGCCAGCCGCTCCAGCT AGCTGGACGCGTCCGACTATATA TATAATGAGTGTCGACGCGTCCAGACTATATA TATAATGACTGTCGACGCGTCCAGACTATATA TATAATGACTGTCGACGCGTCCACACACTATATA TATAATGACTGTCGCACTCCACACACACCCTCAAAGCC GCCTTCAGGCGCTTCAAGCCGCACACACACACCCCACACACCCCTCAAAGCC GCCTTCAGCCCACACACACCCCCACACACCCCCCACACACCCCCC		776	AGCGTCGCCAGTGATCGCTAGTGG	CCACTAGCGATCACTGGCGACGCT
779 TCGGACGCGTCGACACTCATTATA TATAATGAGTGTCGACGCGTCCGA 780 TCTGAGCAGGCCCTCAGCT AGCTGGAGCGCTGGCCTGCTCAGA 781 TTGAATTGCCAAGCCCTGAAAGCC GGCTTTCAGGGCTTGGCAGTCAGA 782 AGTTTCATAGGCCACGCGTGCTGAAAGCC 783 GTTTCATAGGCCACGCGTGCTAAA TTTAGCACAGCCGTAGAAACT 784 GGAGCGAAGACTTCGTCTGCCCAA TTGAGACGCAGCGCTAGAAACT 785 ATTGGCCAGGGGTGATACAA TTTAGCACGCGTGGCTATGAAAC 784 GGAGCGAAGACTTCGTCTGCCCAA TTGGGCAGAGACTTCGCTCC 785 ATTGGCCAGAGGGTGAATGCAGCCT AGGCTGACCACCCTCGGCCAAT 786 TGATCCATCCGAATGCTTTTCCAT ATGGAAAAGCATTCGGATGGATCA 787 GCACACAGTTGTCTTGGCCCCATA TCATGGAAAAGCATCGGATGGATCA 788 CTGGCGGGCAGTGGAAAAAACAAC GTTGTTTTTCCACTGCCCGCCAG 789 ATCTCCATTGCGTAAGACTGCTCCC CGGAGCAGTCTTACGCATGGACA 789 ATCTCCATTGCGTAAGACTGCTCCG 789 ATCTCCATTCCGCAGTTCCTGGACAACACACTGCGAGCAGAGAAA 781 TAGCGTATTCACTCTTTGCCGAGAC TCACGAACACTGCGAGCAGAGAA 781 TAGCGTATTCACCTTTTCCCAGACA TCCTGGCCAGAGAGAGTGAAA 782 CAATCAAAAGCCACGGCGCGATGG CCATCGGCAAGAGGAGGAGA 783 AGCGTCACGGAATTCAGCAGAAT TCGGCGCCGTGGCTTTTGATTG 784 GACTCCCTGTTAATGCGCCCAAGG CCTTGGGCCATGAACACGCT 785 TAGGCCACTGCTAAGACTCT AGATCTGAACCGGCAGTGACT 786 AACAGGGTGATAAGCGTGCCCAAGG 787 AGCCACTTCACCAGGTTCAA 787 AGCCACATTCTATTGCCCCCAAGG 788 AACAGGGTTAAAGCGTGGCCAAT ATTGGCCACCGTTATCACCCTGTT 789 AACAGGGTGATAACGGTGGCCAAT ATTGGCCACCGTTATCACCCTGTT 780 CGTGCGTACCATGTGAAGTCCA TGGGCACATTACACATGGTACCACG 788 GACCAATTCTACTTCGGCAGCCCA TGGGCTACCAGTATCACCCTGTT 789 ATCGGACCAGTTTTCCTTTGCTGCAGCCCA 789 GACCAATTCTACTTCGGCAGCCCA 789 ACCGACTTTCACTCTTTCCCTGACTC 789 ATCGGCCGAAGCACACGCTTATTCC CGACATAAGCAATGCGTCCCCTGTT 780 ACCGCCAGATCGGTTTTCCCTTGATC 780 ACCGACCTCACGACTCTATCC CAACCCACAATACCGGTGTGCCCAT 800 TCCGCCGAAGCACACACTAT ATATGCTCACACTGGTCACCCTGT 800 TCCGCCGAAGCACACATAT ATATGCTGCACAATACCACCGG 801 AACGGTTTTATCGGAACTCTGGACTGAACCACATACCGGTTAACACCACTGAACCACACACA		777	TACATTCCCTGCCTCCGTGGGCTT	AAGCCCACGGAGGCAGGGAATGTA
TCTGAGCAGGCCAGCGCTCCAGCT 781 TTGAATTGCCAAGCCCTGAAAGCC 782 AGTITTCAGCCTTGATGCGTGGTG 783 GTTTCATAGGCCACGCTGCTAAA 784 GGAGCGAAGACTTCGTCTGCCCAA 785 ATTGGCCAGGCGTGCTAAA 785 ATTGGCCAGGCGTGCTAAA 786 TGATCCATCGCATGTGCCCAA 787 GGAGCGAAGACTTCGTCTGCCCAA 787 GCACACAGTTGTCTTGGCCCAA 788 TGATCCATCCGAATGCTTTTCCAT 788 CTGGCGGAGCAGTGCTTAGAA 787 GCACACAGTTGTCTTGGCCCATGA 788 CTGGCGGCAGTGGTTTTCCAT 788 CTGGCGGCAGTGGAAAAACAAC 787 GCACACAGTTGTCTTGGCCCATGA 789 ATCTCCATGCGAATGCTTTTCCAT 780 ATCTCCATGCGTAAAAACAAC 781 TAGCGTATTCACTCTTGGCCCATGA 780 ATCTCCATGCGTAAGACTGCTCCG 780 ATCTCCATGCGTAAGACTGCTCCG 780 ATCTCCATGCGTAAGACTGCTCCG 780 ATCTCCATGCGTAAGACTGCTCCG 780 TCTCCTCTCGTCGCAGTTCGTGGA 781 TAGCGTATTCACTCTTGCCGAGCA 782 CAATCAAAAGCCACGGCGGAATG 781 TAGCGTATTCACTCTTGCCGAGCA 782 CAATCAAAAGCCACGGCGCGATGG 783 AGCGTCACGGAATTCAGCAGATCT 784 GACTCCCTGTTAATGCGCCCAAGG 785 TAGGCACTGCGGGTTCAGATTCAA 786 AACAGGGTGATAAAGGCAGCCC 786 AACAGGGTGATTAAGTGCCCCAAGG 787 CGTGCGCACTGAATCAA 787 CGTGCGTACCATGTGAAGTCAA 788 GACCAATTCACTCTTTGGCCCAATG 789 AACAGGGTGATAACGGTGCCAAT 780 AACAGGGTGATTAAGTGCCT 780 AACAGGGTGATTAAGTGCCT 780 AACAGGGTGATTAAGTGCCT 781 AGCCACTTCACCATGTTAAGTGCCT 782 CGTGCGAACATTTCACCATGTTAAGTGCCT 783 AGCCACTTTCACCATGTTAAGTGCCT 784 AACAGGGTGATTAAGTGCCT 785 AACAGGGTGATTAAGTGCCT 786 AACAGGTTGCTTTATTGGCCCCAAT 787 CGTGCGTACCATGTGTAAGTGCCT 788 GACCAATTTCACTTTTTGGCTC 789 ATCGGACCAGTTTTTTTGGCTC 789 ATCGGACCAGTTTTTTTTGGCTC 780 CAGCAGAGCACACGCTTATTCC 780 ACCAATTCACTCTTGGCACCCA 801 AACGGTACGATTTTTTTTGGCTC 802 TGGCGACTACAATGCTAACC 803 CAGAGGGGACAGCCGTTTGCCTTAATCACCATGGTTACCACTGTTC 804 CGGTGGTTTTATGGCACCCA 805 TTGGCCTCCGACTCACGACTAT 806 CGTTTTGCGTAGCATCT 807 CGGCGACTACACTGGCGCAACCAGCTTATCACCATGGCCAAAGCAAATCCGACCAATGCAACCAGCCATTATT 808 AATTTGGCTGCGACCCGGTGGATC 809 CGCTATGGTGGCGCGGATGCCATGCCACGCCTAAACCGACCAATGCAACCAATCCACCGTTAACCGCCACATGCAAC 801 ACTAAGCGGTGGGACCGAGGCCTAAACCGACCAATTCCACCGCTTAACCGCCCACACTCCACCGTTTACCACCGTTAACCGCCCACACTCCACCGTTAACCCGCCCAATGCAACCACTAGCACACCACTTTGCGCGCCAACCCACTGCACCCACTAGCACCACTCC		778	CGCTTCGCGTATTCAGTAGCGGTT	AACCGCTACTGAATACGCGAAGCG
781 TIGAATIGCCAAGCCTGAAAGCC 782 AGTITTCACCTTGATGCGTCGTC 783 GTITCATAGGCCACGCGTGCTAAA 784 GGAGCGAAGACTTTGCTCTGCCCAA 785 ATTGGCCGAGGGTGATGAAA 786 GGAGCGAAGACTTCGTCTGCCCAA 787 TIGGGCGAAGACTTTGCCCCAA 787 TIGGCCGAGGGTGATGCCCCAA 788 TIGGCCGAGGGTGATGCACCCT 788 TIGGCCGAGGGTGATGCACCCT 788 TIGGCCGAGGGTGATTCACCCCTCGGCCCAT 789 TIGATCCATCCGAATGCTTTTCCAT 787 GCACACAGTTGTCTTGGCCCATGA 788 CTGGCGGGCAGTGGAAAAAACAAC 789 ATCTCCATGCGATGAAAACACAC 789 ATCTCCATGCGTAAGACTGCTCCC 789 ATCTCCATGCGATGAAAACACAC 789 TIGCCCTCTCGCAGTTCGTGGA 780 TICCCCTCTCGCAGTTCGTGGA 780 TICCCCTCTCGCAGTTCGTGGA 781 TAGCGTATTCACCTTTGCCAGATTCAGCAGACAACACTGTGTGC 782 CAATCAAAAGCCACGGCGCGATGG 784 GACTCCCTGTTAATGCCGCCAAGG 789 ACCCCTGTTAATGCCGCCAAGG 789 ACCCCTGGTTAAGACTCTCAGCAGATCT 780 CAATCAAAAGCCACGGCGCGATGG 781 GACCCAGACTCTGAGAATCCACATTCAGCAGAACTAGCATACGCTA 782 CAATCAAAAGCCACGGCGCGATGG 784 GACTCCCTGTTAATGCCGCCAAGG 785 TAGGCACTACCGGAATTCAA 786 AACAGGTGATAACACGTGGCCCAAG 787 TAGGCACTGCTGAATTCCATTCAA 787 GCTGCGTACCATGTGAATTCAA 788 CACAGGTGATACACGTGGCCCAAG 788 AACAGGTGATAACACGTGGCCCAAT 789 AACAGGTGATACACGTGGCCCAAT 780 AACAGGTGATACACGTGGCCCAAT 780 AACAGGTGAATACACGTGGCCCAAT 780 AACAGGTGAATCACGTTTACACCTTGTT 787 CGTGCGTACCATGTGTAAGTGCGT 788 GACCAATTCTACTTCGGCAGCCCA 788 GACCAATTCTACTTCGCAGCCCAA 788 GACCAATTCTACTTCGCAGCCCAA 788 CGGCCAAAAGCAAATCGGTCCGGA 789 AACAGGTACCATGTTTGCTTTTGCTT 789 AACAGGTACCATTTTGCTTTTGCTT 789 ATCGGACCGATTTTTGCTTTTGCTT 789 ATCGGACCGATTTTTGCTTTTGCTT 789 ATCGGACCGATTTTTGCTTTTGCTT 789 ATCGGACCATTTTTTGCTTTTGCTT 780 ACCGCGAAAGCAAATCCGGTACCATTTCACCATTGCTCCCGGA 780 TCGCCCGAAGCACACGCTTATCCC 780 AACAGGTACCATTTTTGCTTTTGCTTTCGCGAGAAACAAATCGGTCCCGAT 780 AACAGGTACCATTTTTGCTTTTGCTTTACCCTTGAACCGGGAAAACAAATCACCACAATTCGAACAATTCGGAACAATCCGAATCCGATCACAATTCGGAACAATAT 780 AACAGGGGACAACCACGCTTATCCCCTCAATC 780 AACAGGGGACAACCCGTTTACCAATTCGGACCACAATCCAATACCGACAATAT 780 AACAGGGGACAACCACGCGAATCCCGAATCCAATCCGACCACATACCGG 780 ATTTTCCCTTGGACCCCAATCCGACCACATACCGGCCCAATACCACACCACACCACTACCACACCACACCACTACCACACACCAC		779	TCGGACGCGTCGACACTCATTATA	TATAATGAGTGTCGACGCGTCCGA
782 AGTITICGCCTIGATGCGTCGGTC 783 GTITCATAGGCCACGCGTGCTAAA 784 GGAGCGAAGACTICGCCAA 784 GGAGCGAAGACTICGCCCAA 785 AITGGCCGAGGGTGAAA 786 GGAGCGAAGACTICGCCTCTGCCCAA 786 TGATCCATCCGAATGCTTTCCCCT 786 TGATCCATCCGAATGCTTTTCCAT 787 GCACACAGTTGTTTTCCAT 787 GCACACAGTTGTTTTCCAT 788 CTGCCGGGCAGAGACTCTGGATCA 789 ATCTCCATCCGAATGCTTTTCCAT 789 ATCTCCATCGCAATGCTTTTTCCAT 780 TCTCCTCTCGCCCATGA 781 TCACCTCGCCCATGA 782 ATCTCCATCGCAATGCTTTTCCCAT 784 CTGCCGGGCAGGAAAAACAAC 785 ATCTCCATGCGTAGAACTGCTCCC 786 ATCTCCATGCGTAGAACTGCTCCC 787 TCTCCTCTCGCCGTAGACTGCTCCC 780 TCTCCTCTCGCAGTTCGTGAA 790 TCTCCTCTCGCAGTTCGTGAA 791 TAGCGTATTCACTCTTGCCGAGCA 792 CAATCAAAAGCCACGGCCGCATGG 793 AGCGTCACGGAATTCAGCAGACT 794 GACTCCCTGTTAATGCGCCCAAGG 795 TAGCACTGCCGGTTCAGATTCAA 796 AACAGGGTGATAACAGGGCCCAT 796 AACAGGGTGATCAAGTTCAA 797 CGTGCGTAACACTGCCCAATG 798 GACCAATTCTACTCTGCCCCAAG 798 GACCAATTCACCATGTTAATGCCCCAATG 799 ATCGGACCAGTTTAATGCCCCAATG 799 ATCGGACCAGTTTTATGCCCCAAG 799 AACAGGGTGATAACGGTGCCCAA 799 AACAGGGTGATAACGGTGCCCAA 799 AACAGGTTAACACTGTGTAAGTGCGT 799 ATCGGACCAGTTTTTCCCCTGAATC 799 ATCGGACCAGTTTTTTTGCTTTTTGCCTG 801 TCCGCCGAAGCACACGCTTATTCC 802 CAATAAACCGTTCCCTTTT 802 CAACAGGATTCACACTTTTTCCCCAAATCCGTTCCCCTTTT 803 CAGAGGGGACACCCTTATTCCC 803 CAGAGGGGACACCCTTATTCCC 804 CACGCAATACCGCTTCCCCTTG 804 CAGGTTTTATCGGAATCCTTT 805 CAGAGGGGACACCCTTATGCCTT 806 CACCAATACCACTTTTCCCCTGAATC 807 CAGAGGGGACACCCTATGCCTTA 808 CACCAATACCACTTTTCCCCTGAATC 809 CACCAATACCACTTTTCCCCTGAATC 800 CAGAGGGGACACCCTATGCCTTA 800 CAGAGGGGACACCCTATGCCTTA 800 CAGAGGGGACACCCTATGCCTTA 801 CAGAGGGGACACCCTATGCCCCA 803 CAGAGGGGACACCCTATGCCTTA 804 CACCACTTCACCACTGCACCCA 805 CAGAGGGGACACCCCTATGCCCCA 806 CGTTTCGCTAGGACCCA 807 CACCCCGACTCCACCCCA 807 CACCCCGCCTCCACCCCA 808 ATATTGCCTCCACACCCCCA 809 CCCCTATGCTCCCCCTCCACCCCACTCCACCCCCTTGCACCCACTCCACCCCTTTGCCCCCACACCCCAATAT 809 CCCCTATGGTGCCCCAATCCCCCCACACCCCAATCCCCCCACACCCCAATCCCCCC	5	780	TCTGAGCAGGCCAGCTCCAGCT	AGCTGGAGCGCTGGCCTCAGA
783 GTTTCATAGGCCACGCGTGCTAAA 784 GGAGCGAAGACTTCGTCTGCCCAA 785 ATTGGCCGAGGGTGAATGCAGCCT 786 TGATCCATCCGAATGCTTTTCCAT 787 GCACACAGTTGTCTTGGCCCAA 788 CTGGCGGGCAGTGAATGCAGCCT 787 GCACACAGTTGTCTGTCCATGA 788 CTGGCGGGCAGTGAATGCAGCCT 789 ATCTCCATGCGTAGAAAAAACAAC 789 ATCTCCATGCGTAGAAAAAACAAC 789 ATCTCCATGCGTAGAAAAAACAAC 780 TCTCCTCTCGTCGCAGTTCGTGGA 780 TCTCCTCTCGTCGCAGTTCGTGGA 781 TAGGGAATACACTCTTGCCAGACA 782 ATCTCCATGCGTAGAAAAACAAC 784 TAGGAAAAGCCAGGCGCAGTGA 785 ATCTCCATGCGTAGAAAAACAAC 786 TGACGGAGAGAAAAACAAC 787 TAGGGTATTCACTCTTGCCAGACA 788 ATCTCCATGCGTAGAGACTGCTCC CGGAGCAGTCTTACGCAGGAGA 789 TAGGGTATCACTCTTGCCAGACA 790 TCTCCTCTCGTCGCAGTTCGTGGA 791 TAGGGTATTCACTCTTGCCAGACA 792 CAATCAAAAGCCACGGCGCAGTGG CCATCGCGCCGTGGCTTTTAATTG 793 AGCGTCACGGAATTCAGCAGATCT AGATCTGCAATTCCAGTATTCCATTTGCTGAATTCCGTGACGCTA 794 GACTCCCTGTTAATGCGCCCAAAG 795 TAGGCACTGCCGGTTCAGATTCAA 796 AACAGGGTGATAACGGTGGCCAAT 797 CGTGCGTACCATGTGTAAAGTGCGT 797 CGTGCGTACCATGTGTAAAGTGCGT 798 ACCAGATTCTACTTCGGCACCCCA 799 ATCGGACCAATTCATCTCGGCACCCA 799 ATCGGACCAATTGTTTGGCT 799 ATCGGACCGATTGTTGGCT 799 ATCGGACCGATTGTTGGCT 790 ACCGCAAAAGCAAATCGGTCCGAT 790 ACCGCCAAAGCAAACCACGCTTATTCC 790 ACCGGAATCACGCATT 790 ACCGCCAAAGCAAATCGGTCCCGAT 791 ACCGGCCCAAAGCACACGCTTATTCG 790 ACCGCCAAAGCAAATCGGTCCCGAT 790 ACCGCCAAAGCAAATCGGTCCCGAT 790 ACCGCCCAAAGCAAACCACGCTTATTCG 790 ACCGCCAAAGCAAATCGGTCCCGAT 790 ACCGCCCAAAGCAAATCGGTCCCCAT 790 ACCGCCCAAAGCAAACCACGCTTATCC 790 ACCGCCAAAGCAAATCCGTTCCCCTGTT 790 ACCGCCCAAAGCAAACCACGCTTATCC 790 ACCCCCAAAGCAAATCCGGTCCCCATGCCGAT 790 ACCACCGCCTAACCACCCCATACCCGCCCAATCCCCCATACCCCCCATACCCCCACTCCCCCATACCCCCACTTCCCCCC		781	TTGAATTGCCAAGCCCTGAAAGCC	GGCTTTCAGGGCTTGGCAATTCAA
784 GGAGCGAAGACTTCGTCTGCCCAA 785 ATTGGCCGAGGGTGAATGCAGCCT 786 TGATCCATCCGAATGCTTTTCCAT 787 GCACACAGTTGTTTTGCCAT 787 GCACACAGTTGTTTTGCCAT 788 ATGTCCATCCGATGCTTTTCCAT 788 TGATCCATCCGATGCTTTTCCAT 787 GCACACAGTTGTTTTGCCAT 788 ATGTCCATCCGATGCTTTTCCAT 789 ATCTCCATGCGTAAGACTGCTCCC 789 ATCTCCATGCGTAAGACTGCTCCC 789 ATCTCCATGCGTAAGACTGCTCCC 780 TCCCCTCTCGTCGCAGTTCGTGGA 781 TAGCGTATTCACTCTTGCCGAGCA 782 CAATCAAAAGCCACGGCGCGATGG 784 GACTCCCTGTCAGCAATCCAAGACTGCACAGAGAGAGAGA		782	AGTTTTCGCCTTGATGCGTCGGTG	CACCGACGCATCAAGGCGAAAACT
10 785 ATTGGCCGAGGGTGAATGCAGCCT AGGCTGCATTCACCCTCGGCCAAT 786 TGATCCATCCGAATGCTTTTCCAT ATGGAAAAGCATTCGGATGGATCA 787 GCACACAGTTGTCTTGGCCCATGA 788 CTGGCGGCCAGTGGAAAAAACAAC GTTGTTTTTTCACTGCCCGCCAG 789 ATCTCCATGCGTAAGACTGCTCC CGGAGCCAGTCTTACCCATGGAGGA 789 ATCTCCATGCGAGTTCCTCG CGGAGCAGTCTTACCCATGGAGGA 789 ATCTCCATGCGAGTTCCTGGA TCCACGAACTGCAGCAGGAGAGAGAGAGAGAGAGAGAGAG		783	GTTTCATAGGCCACGCGTGCTAAA	TTTAGCACGCGTGGCCTATGAAAC
786 TGATCCATCCGAATGCTTTTCCAT ATGGAAAAGCATTCGGATGGATCA 787 GCACACAGTTGTCTTGGCCCATGA TCATGGGCCAAGACAACTGTGTC 788 CTGGCGGGCAGTGGAAAAAACAAC GTTGTTTTTTCACTGCCCGCCAG 789 ATCTCCATGCGTAAGACTGCTCCG CGGAGCAGTCTTACGCATGGAGAT 790 TCTCCTCTCGTCCAGTTCCTGGA TCACACGAACTCGCCGCCAG 789 ATCTCCATTCGTCCAGTTCCTGGA TCACACGAACTGCCAGCAGAGAGAGAACACTTTGCCTTGCCAGTTCCTGCAGAGACTAGACTGCCAGACACACTGCCAGACAGA		784	GGAGCGAAGACTTCGTCTGCCCAA	TTGGGCAGACGAAGTCTTCGCTCC
787 GCACACAGTTGTCTTGGCCCATGA TCATGGGCCAAGACAACTGTGTGC 788 CTGGCGGCAGTGGAAAAACAC GTTGTTTTTCCACTGCCCGCCAG 789 ATCTCCATGCGTAAGACTGCTCCG CGGAGCAGTCTTACGCATGGAGAT 790 TCTCCTCTGTCGCAGTTCGTGA TCCACGAACTGCGACGAGAGAGAGAAAAACAC TGTGCCCGCCAG 791 TAGCGTATTCACTCTTGCCGAGCA TGCTCGGCAAGAGTGAATACGCTA 792 CAATCAAAAGCCACGGCGCGATGG CCATCGCGCCGTGGCTTTTGATTG 793 AGCGTCACGGAATTCAGCAGAACT AGATCTGCTGAATTCCGTGACGCT 794 GACTCCCTGTTAATGCGCCCAAGG CCTTGGGCGCATTAACAGGGAGTC 795 TAGGCACTGCCGGTTCAGATTCAA TTGAATCTGAACCGGCATTAACAGGGAGTC 796 AACAGGGTGATAACGGTGGCCAAT ATTGGCCACCGTTATCACCCTGTT 797 CGTGCGTACCATGTGTAAGTGCGT ACGCACTTACACATGGTACGCACG 798 GACCAATTCTACTTCGGCAGCCCA TGGCCTGCAAAAAGCAAATCGGTCCGAT 799 ATCGGACCGATTTGCTTTTGGCTG CAGCCAAAAAGCAAATCGGTCCGAT 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAAGCATGATCGCACG 801 AACAGGTACGCATTGTGAAGTGT ACACTGCTCACAATGCGTCCGAT 802 TGGCGACTACTGTTCACCCTGATC GATTCAGAGGAACAATCGGTCCCAA 803 CAGAGGGGACACGCCTTATTCG CGAATAAAGCATAGTCGCCCA 803 CAGAGGGGACAACGCCTTATTCG CGAATAAAGCAATCGGTCCCAT 804 CGGTGGTTTTATCGGAATCTGCTTA TAAGGCATACAGGCTGTCCCCTCTG 804 CGGTGGTTTTATCGGAATCTGCCTTA TAAGGCATACGGCTTACCCCTCTG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGACACACCCG 807 ACTAAGCGGTGGAACCCGGTTGCCCT 808 ATATTGGCTTCCCTGACCACTCCGAACACCGCCCAAAACCACCG 807 ACTAAGCGGTGGACCCGA TCGGCGCCAAAACCACCG 807 ACTAAGCGGTGGACCCGGTTGCCTTA 808 ATATTGGCTTCCCTCAGCACTAC TAACACCCGGCTCCACCGCTTAGT 809 CCGCTATGGCTTCACGACCATAT ATATGTCGTGAGGCAAACG 807 ACTAAGCGGTGGACCCGGCGCA TCGGCCCCAAAACCACCACCG 809 CCGCTATGGGTCCACCGATTCCCCTCTGGACCACATACT 809 CCCCTATGGGTCCAGCCCAATAT ATATGTCCGGCTCACCCGCTTAGT 809 CCCCTATGGGTCCAGGCCATA TATGCCGCCCGAACCCAATAT 809 CCCCTATGGGTCCAGGCCAATAT ATATGTCGGGCCCAAAACGAACCAACAACACACCAGGCCAATAT 809 CCCCTATGGGTCCAGGCCAATAC GTATCCGGCCCAAACACAACAACACCACCAACAACAACAACAAC	10	785	ATTGGCCGAGGGTGAATGCAGCCT	AGGCTGCATTCACCCTCGGCCAAT
788 CTGGCGGCAGTGGAAAAAACAC GTTGTTTTTCACTGCCCGCCAG 789 ATCTCCATGCGTAAGACTGCTCCG CGGAGCAGTCTTACGCATGGAGAT 790 TCTCCTCTCGTCGCAGTTCGTGGA TCCACGAACTGCGACGAGAGAGAGAGAGAGAGAGAGAGAG		786	TGATCCATCCGAATGCTTTTCCAT	ATGGAAAAGCATTCGGATGGATCA
15 789 ATCTCCATGCGTAAGACTGCTCCG CGGAGCAGTCTTACGCATGGAGAT 790 TCTCCTCTCGTCGCAGTTCGTGGA TCCACGAACTGCGACGAGAGAGAGA 791 TAGCGTATTCACTCTTGCCGAGCA TGCTCGGCAAGAGTGAATACGCTA 792 CAATCAAAAGCCACGGCGCGATGG CCATCGCGCCGTGGCTTTTGATTG 793 AGCGTCACGGAATTCAGCAGATCT AGATCTGCTGAATTCCGTGACGCT 794 GACTCCCTGTTAATGCGCCCAAGG CCTTGGGCGCATTAACAGGAGTG 795 TAGGCACTGCCGGTTCAGATTCAA TTGAATCTGAACCGGCAGTGCCTA 796 AACAGGGTGATAACGGTGCCAAT ATTGGCACCCGTATACACGGAGTC 797 CGTGCGTACCATGTAAGTGCGT ACGCACTTACACACTGTACCCTGTT 797 CGTGCGTACCATGTGTAAGTGCGT ACGCACTTACACATGTACCCTGTT 798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAATGAAGTTGGTC 798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAAGAAGAATCGGTCCGAT 799 ATCGGACCGATTTGCTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAGCGTGTCTCTGGCGGA 801 AACGGTACGCATTGTGAGCAGTGT ACACTGCTCACAATGCGTCCCAT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGTTCCCCTTG 804 CGGTGGTTTTATCGGAATCTGCGA 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTGCCCAA 806 CGTTTCGCTACACACTCTGCGCCGA TCGCACAATGCCGAAGCCAAACG 807 ACTAAGCGGTGGATTGCTTA ATATGTCGTGAGGTCGGAAGCCAA 806 CGTTTCGCTACCACTCACGACATAT ATATGTCGTGAGGTCGCACAATGT 807 ACTAAGCGGTGGCCCGA TCGCCCCAATGCTAGCGAACCG 807 ACTAAGCGGTGGATCCCGATAC GATCCACCGCTCCACCCCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGA TCGCGCCCAAAGCCACAATGT 809 CCGCTATGGTGGCCAATCCCGATAC GTATCGGGATTGCCCACCCACTATGT 809 CCGCTATGGTGGCCAATCCCGATAC GTATCGGGATTGCCCACCCACATAGT 809 CCGCTATGGTGGCCAATCCCGATAC GTATCGGGACCACAATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGAGCCACCATGCAAC 811 ATTCTGGGGAGTCCCAAGGCCAATGT ACATTGGCCCCAAATCCCCTTTGCAGAAG 812 CTCTCCAAGGAGCCAATGT ACATTGGCCCCAAATCCCGTCCTTTCCCCAAGAGCAACCAATAT 812 CTCTCCAAGGAGCCAATGT ACATTGGCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTTGGCTCCGCCCA TGGCGCCAAAGCCAAAGGAACCAACAGAACCAACAGAACAAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAGAACAA		787	GCACACAGTTGTCTTGGCCCATGA	TCATGGGCCAAGACAACTGTGTGC
15 790 TCTCCTCTGTCGCAGTTCGTGAA 791 TAGCGTATTCACTCTTGCCGAGCA TGCTCGGCAAGCGAAGGGAGA 791 TAGCGTATTCACTCTTGCCGAGCA TGCTCGGCAAGAGTGAATACGCTA 792 CAATCAAAAGCCACGGCGCGATGG CCATCGCGCCGTGGCTTTTGATTG 793 AGCGTCACGGAATTCAGCAGATCT AGATCTGCTGAATTCCGTGACGCT 794 GACTCCCTGTTAATGCGCCCCAAGG CCTTGGGCGCATTAACAGGGAGTC 795 TAGGCACTGCCGGTTCAGATTCAA TTGAATCTGAACCGGCAGTGCCTA 796 AACAGGGTGATAACGGTGGCCAAT ATTGGCCACCGTTATCACCCTGTT 797 CGTGCGTACCATGTGAAGTGCGT ACGCACTTACACATGGTACGCACG 798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAAGTAGAATTGGTC 799 ATCGGACCGATTTGCTTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 800 TCCGCCGAAGCACACACGTTATTCG CGAATAAGCGTGTGCTCTCGGCGGA 801 AACGGTACGCATTTTCCCCTGAATTC GATTCAGCAGACAATCGGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGAACAGTAGCCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGCCCCTCTG 804 CGGTGGTTTATCGGAATCTCGAA 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGAGGTGCCCAAAC 806 CGTTTCGCTAGCATCTGGCCCAA 807 ACTAAGCGGTGGAGCCCGA TCGGCGCCAGATGCTACACCCG 807 ACTAAGCGGTGGAGCCCGATAC GATCCACCGGCTCCACCACATACT 808 ATATTGGCTCGCACTCACGACATAT ATATGTCGAGGTCCCACCACATACT 809 CCGCTATGGTGGACCCGGTGGATG CATCCACCGGCTCCACCACATACT 809 CCGCTATGGTGGACCCGATAC GTATCGGCACCACACACCG 807 ACTAAGCGGTGGAGCCCGATAC GTATCGGCACCCACATACT 808 ATATTGGCTCGCTCACCGACTTA TATGCCGCCCGAACCGCCAATAT 809 CCGCTATGGTGGCCCAA CGTATCCCCACCACTACCGGCTCACCCACTACCGG 801 ATTCGGCGAACCCGATAC ATTCGGCCCCACACACCCACACCCACACACCCACACACCCACACAC		788	CTGGCGGCAGTGGAAAAAACAAC	GTTGTTTTTCCACTGCCCGCCAG
791 TAGCGTATTCACTCTTGCCGAGCA TGCTCGGCCAGAGAGTGAATACGCTA 792 CAATCAAAAGCCACGGCGCGATGG CCATCGCGCCGTGGCTTTTGATTG 793 AGCGTCACGGAATTCAGCAGATCT AGATCTGCTGAATTCCGTGACGCT 794 GACTCCCTGTTAATGCGCCCAAGG CCTTGGGCGCATTAACAGGGAGTC 795 TAGGCACTGCCGGTTCAGATTCAA TTGAATCTGAACCGGCAGTGCCTA 796 AACAGGGTGATAACGGTGGCCAAT ATTGGCCACCGTTATCACCCTGTT 797 CGTGCGTACCATGTGTAAGTGCGT ACGCACTTACACATGGTACGCACG 798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAAGTAGAATTGGTC 799 ATCGGACCGATTTGCTTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAGCGTTGCTTCGGCGGA 801 AACGGTACGATTTGCATTTCC CGAATAAGCGTTGCTTCGGCGGA 802 TGGCGACTACTTTCCCCTGAATC GATTCAGAATCGCTCCCTTG 804 CGGTGGTTTATCGGAATCTGGA 805 TTGGCCTCCGACCTACGACATA ATATGTCGTGAGGTCGAAACCACG 806 CGTTTCGCTAGCATCTTA TAAGGCATTCGGATAAAACCACCG 807 ACTAAGCGTGGAACCACTACTAT ATATGTCGTGAGGTCGGAAACG 806 CGTTTCGCTAGCAATCTAATATGTGTGAGGTCGAAACG 807 ACTAAGCGGTGGAGCCGATTGCCTTA 808 ATATTGGCTGCGTTTACGGGCCGA TCGGCGCCAAAAGCAACACACGATTAT 809 CCGCTATGGTGGCCCGA TCGGCCCAAAACGAACCAATAT 809 CCGCTATGGTGGCCCGA TCGCGCCCGAAACGCACCAATAT 809 CCGCTATGGTGGCCCGC GCGGCCCGTAAACGCACCAATAT 809 CCGCTATGGTGGCCCAATCCCGATAAC 811 ATTCTGGGGAGTCCAGGCCATA TATGCCGCCTCACCGCTTAGC 811 ATTCTGGGGAGTCCCAGGCCTTA 812 CTCTCCAAGGAGACCCAATGT AAGCCCTGGGTCACCCCATACCAC 813 GAAAGGACGGGATTTGGGGGCCAA TTAGCCCCCAAATCCCCCAGAAT 814 TATGTAGTACCTTGGCTCCCCCACAATCT ACACTCGCCCCAAATCCCCCAGAAT 814 TATGTAGTACCTTGGCTCCCCCACACTTACT ACTTCGCCCCAAAACCCCGCTTTTC 814 TATGTAGACCCTGGCCCCAATACT AGCCCCCAAAACCCCGCTTTTC 814 TATGTAGACCCTGGCCCCAATACT ACTTCGCCCCCAAATCCCGTCCTTTCC 814 TATGTAGACCCTTGGCGCCCAATACT ACTTCGCCCCCAAATCCCGTCCTTTCC 814 TATGTAGACCCTCGCCCCAATACT ACTTCGCCCCCAAATCCCGTCCTTTCC 815 TCCCTTTCGATGAGCGGCCTTAACTCCGCCCCAAATCCCGTCCTTTCC 816 TATCGGAGCGGCCTAAACGCGCCCCAATACCCGGCCTCAAACCGCAATATCCGGCCCCAATACCCGCCCAATACCCGGCCCAATCCCCAAATCCCGTCCTTTCC 814 TATGTAGATACCTTGGCTCGCCCCAATCCCCCAAATCCCGTCCTTTCC 815 TCCCTTTCGATGAGCGGCCTAAACGGCGCCCAATACCCGCCCAATACCCGCCTCAAACCCGCCAATACCCGCCCAATCCCCAAATCCCGCCCAATCCCCAAATCCCGCCCAATCCCCAAATCCCGCCCAATCCCCAAATCCCGCCCAATCCCCAAATCCCGCCCAATCCCCAAATCCCGC		789	ATCTCCATGCGTAAGACTGCTCCG	CGGAGCAGTCTTACGCATGGAGAT
792 CAATCAAAAGCCACGGCGCGATGG CCATCGCGCCGTGGCTTTTGATTG 793 AGCGTCACGGAATTCAGCAGATCT AGATCTGCTGAATTCCGTGACGCT 794 GACTCCCTGTTAATGCGCCCAAGG CCTTGGGCGCATTAACAGGGAGTC 795 TAGGCACTGCCGGTTCAGATTCAA TTGAATCTGAACCGGCAGTGCCTA 796 AACAGGGTGATAACGGTGGCCAAT ATTGGCCACCGTTATCACCCTGTT 797 CGTGCGTACCATGTGTAAGTGCGT ACGCACTTACACATGGTACGCACG 798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAAGTAGAATTGGTC 799 ATCGGACCGATTTGCTTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 799 ATCGGACCGATTTGCTTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAGCGTGTCTTCGGCGGA 801 AACGGTACGCATTGTGAGCAGTGT ACACTGCTCACAATGCGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGCCCAT 804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGCGCCCGA TCGCGCCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGATGCCTCACGACTAT 808 ATATTGGCTGCGTTTACGGGCCCG GCGCCCAGATGCTACCGCTTAGT 809 CCGCTATGGTGGCACCGCGTGATC 809 CCGCTATGGTGGCAACCGGTTAACACCCCGGTTAGC 810 GTTGCATGTGGCACCAACATAT ATATCCGGCTCCACCACTAACGGG 811 ATTCTGGGGATTCCGGAATC 812 CTCTCCAAGGAGACCAATGT AACCCCTGAGCCACATACCAC 813 GAAAGGACGGGATTAGGGGCCAA TATGCCGCCTCACCCACAACAC 814 ATATGTAGTACCTTGGCGCCCA TGGCCCCAAATCCCCCAGAAC 815 GAAAGGACGGGATTTGGGGCCCA TGGCCCCAAATCCCCTTTCC 814 TATGTAGTACCTTGGCTCCCCCACACTACCACGCCCCAAATCCCCCCAAACCACCAACCA	15	790	TCTCCTCTCGTCGCAGTTCGTGGA	TCCACGAACTGCGACGAGAGGAGA
793 AGCGTCACGGAATTCAGCAGATCT AGATCTGCTGAATTCCGTGACGCT 794 GACTCCCTGTTAATGCGCCCCAAGG CCTTGGGCGCATTAACAGGGAGTC 795 TAGGCACTGCCGGTTCAGATTCAA TTGAATCTGAACCGGCAGTGCCTA 796 AACAGGGTGATAACGGTGGCCAAT ATTGGCCACCGTTATCACCCTGTT 797 CGTGCGTACCATGTGTAAGTGCGT ACGCACTTACACATGGTACGCACG 798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAAGTAGAATTGGTC 799 ATCGGACCGATTTGCTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 799 ATCGGACCGATTGCTTTTCG CGAACTAAGCGTAGCACGT 800 TCCGCCGAAGCACACGCTTATTCC CGAATAAGCGTGTGCTTCGGCGGA 801 AACGGTACGCATTGTGAGCAGTGT ACACTGCTCACAATGCGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGAGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGCCCCATGCCCACACAGACCACGCTTTATCGGAATCCGATCCGATCCCCTCTG 804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAAACG 806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCCC GCGGCCCGTAAACGCACCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 811 ATTCTGGGGAGTGACCCAGGCCTT AAGCCCTGAGCCACATACCAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGAGCCACATGCAAC 812 CTCTCCAAGGAGACGAGCCAATGT ACATTGGCTCCCTTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCCA TGGCGCCCAAATCCCGTCCTTTC 814 TATGAGTACCTTGGCTCGCCCA TGGCGCCCAAATCCCGTCCTTTC 814 TATGAGTACCTTGGCTCGCGCCA TGGCGCCCAAAGGGAACCAAACGAACCAAACCA	•	791	TAGCGTATTCACTCTTGCCGAGCA	TGCTCGGCAAGAGTGAATACGCTA
794 GACTCCCTGTTAATGCGCCCAAGG CCTTGGGCGCATTAACAGGGAGTC 795 TAGGCACTGCCGGTTCAGATTCAA TTGAATCTGAACCGGCAGTGCCTA 796 AACAGGGTGATAACGGTGGCCAAT ATTGGCCACCGTTATCACCCTGTT 797 CGTGCGTACCATGTGAAGTGCGT ACGCACTTACACATGGTACGCACG 798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAAGTAGAATTGGTC 799 ATCGGACCGATTTGCTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 799 ATCGGACCGATTTGCTTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAGCGTGTGCTTCGGCGGA 801 AACGGTACGCATTTGTGAGCAGTGT ACACTGCTCACAATGCGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGTCCCCTCTG 804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGCGAAACCG 806 CGTTTCGCTAGCATCTGGCGCCCA TCGCGCCCAGATGCTAGCCAAACG 807 ACTAAGCGGTGGAGCCGATGCCTAACACCCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCCC GCGCCCCGTAAACGCACCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCCGGCTCCACCGCTTAGT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACAATAT 809 CCGCTATGGTGGCAATCCCGATAC AACCCCGCTCACCACATAT 809 CCGCTATGGTGGCAATCCCGATAC ATATCGCGCCTGAGCCACATATACCACCACAACCAACACACAACACAACACAACA		792	CAATCAAAAGCCACGGCGCGATGG	CCATCGCGCCGTGGCTTTTGATTG
20 795 TAGGCACTGCCGGTTCAGATTCAA TTGAATCTGAACCGGCAGTGCCTA 796 AACAGGGTGATAACGGTGGCCAAT ATTGGCCACCGTTATCACCCTGTT 797 CGTGCGTACCATGTGTAAGTGCGT ACGCACTTACACATGGTACGCACG 798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAAGTAGAATTGGTC 799 ATCGGACCGATTTGCTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 799 ATCGGACCGATTGCTTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAGCGTGTGCTTCGGCGGA 801 AACGGTACGCATTGTGAGCAGTGT ACACTGCTCACAATGCGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGTCCCCTCTG 804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGGCCGCA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 35 810 GTTGCATGTGGCCACATAT TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACCCCCAGAAT 812 CTCTCCAAGGAGACCAAGGT AAGCCCTGGGTCACTCCCCAGAAT 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCCTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAAGGGAA		793	AGCGTCACGGAATTCAGCAGATCT	AGATCTGCTGAATTCCGTGACGCT
796 AACAGGGTGATAACGGTGGCCAAT ATTGGCCACCGTTATCACCCTGTT 797 CGTGCGTACCATGTGTAAGTGCGT ACGCACTTACACATGGTACGCACG 798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAAGTAGAATTGGTC 799 ATCGGACCGATTTGCTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 799 ATCGGCCGAAGCACACGCTTATTCG CGAATAAGCGTGTCTTCGGCGGA 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAGCGTGTGCTTCGGCGGA 801 AACGGTACGCATTGTGAGCAGTGT ACACTGCTCACAATGCGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGTCCCCTCTG 804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 35 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACCCCAGAAT 812 CTCTCCAAGGAGACCAACGT ACATTGGCTCCCCAGAAT 813 GAAAGGACGGGCTAA TTAGCCCCCAAATCCCCTTTCC 814 TATGTAGTACCTTGGCTCCGCCCA TGGCGCCAAAGGGAACAAACG 815 TCCCTTTCGATGAGCGGCTTAACT AGTACAGCCGCTCATCCATACATA 40 815 TCCCTTTCGATGAGCGGCTTAACT AGTACAGCCGCTCATCGAAAGGGA		794	GACTCCCTGTTAATGCGCCCAAGG	CCTTGGGCGCATTAACAGGGAGTC
797 CGTGCGTACCATGTGTAAGTGCGT ACGCACTTACACATGGTACGCACG 798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAAGTAGAATTGGTC 799 ATCGGACCGATTTGCTTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 799 ATCGGACCGATTTGCTTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAGCGTGTGCTTCGGCGGA 801 AACGGTACGCATTGTGAGCAGTGT ACACTGCTCACAATGCGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGTCCCCTCTG 804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATACGGG 35 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATACCAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGAGCCACATGCAAC 812 CTCTCCAAGGAGACCAACGAGCTA TATGCCCCCCAGAAT 812 CTCTCCAAGGAGACCAACGAGCCAATGT ACATTGGCTCGTCCTCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCCA TGGCGCACCAATCCCCCCAGAAT 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA	20	795	TAGGCACTGCCGGTTCAGATTCAA	TTGAATCTGAACCGGCAGTGCCTA
798 GACCAATTCTACTTCGGCAGCCCA TGGGCTGCCGAAGTAGAATTGGTC 799 ATCGGACCGATTTGCTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAGCGTGTGCTTCGGCGGA 801 AACGGTACGCATTGTGAGCAGTGT ACACTGCTCACAATGCGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGTCCCCTCTG 804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGAGCCACATGCAAC 812 CTCTCCAAGGAGACCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCCCAAAGGAACGAACCAATATAGAAACGAGCAGCCAATATAGAAACGAGCAGCCAATATAGAAACGAGCAGCCAATATAGAACCAACGAGCAATATAGAACCAACC		796	AACAGGGTGATAACGGTGGCCAAT	ATTGGCCACCGTTATCACCCTGTT
25 ATCGGACCGATTTGCTTTTGGCTG CAGCCAAAAGCAAATCGGTCCGAT 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAGCGTGTGCTTCGGCGGA 801 AACGGTACGCATTGTGAGCAGTGT ACACTGCTCACAATGCGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGTCCCCTCTG 804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCCCA TGGCGCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCCGCCCA TGGCGCCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		797	CGTGCGTACCATGTGTAAGTGCGT	ACGCACTTACACATGGTACGCACG
25 800 TCCGCCGAAGCACACGCTTATTCG CGAATAAGCGTGTGCTTCGGCGGA 801 AACGGTACGCATTGTGAGCAGTGT ACACTGCTCACAATGCGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGTCCCCTCTG 804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACCAAGGTA TATGCCGCCCCAAATCCCCAGAAT 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCCAAGGTACTACATA 815 TCCCTTTCGATGAGCGGCTTACT AGTACAGCCGCTCATCGAAAGGGA		798	GACCAATTCTACTTCGGCAGCCCA	TGGGCTGCCGAAGTAGAATTGGTC
801 AACGGTACGCATTGTGAGCAGTGT ACACTGCTCACAATGCGTACCGTT 802 TGGCGACTACTGTTCCCCTGAATC GATTCAGGGGAACAGTAGTCGCCA 803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGTCCCCTCTG 804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAACCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		799	ATCGGACCGATTTGCTTTTGGCTG	CAGCCAAAAGCAAATCGGTCCGAT
TGGCGACTACTGTTCCCCTGAATC 803 CAGAGGGGACAGCCGTATGCCTTA 804 CGGTGGTTTTATCGGAATCTGCGA 805 TTGGCCTCCGACCTCACGACATAT 806 CGTTTCGCTAGCATCTGCGA 807 ACTAAGCGGTGGAGCCGTTGCCCA 808 ATATTGGCTGCGTTTACGGACCGG 809 CCGCTATGGTGCCCGC 809 CCGCTATGGTGGCAATCCGGACCGATGCTACGACATAT 809 CCGCTATGGTGGCAATCCCGATAC 810 GTTGCATGTGGCCCGATACCGCCCGTAAACGCACCATACCGG 811 ATTCTGGGGAGTCAGGCGGCATA 812 CTCTCCAAGGAGACCAATGT 813 GAAAGGACGGGATTTGGGGCCAA 814 TATGTAGTACCTTGGCGCCCA 815 TCCCTTTCGATGAGCGGCCCA 816 TCCCTTTCGATGAGCCCCACATAC 817 CTCCCAAGGAGACCAATGT 818 CAAAGGACGGGATTTTGGGGGCTAA 819 CAAAGGACGGGATTTTGGGGGCTAA 810 GAAAGGACGGGATTTTGGGGGCTAA 811 ATTCTGGAGAG 812 CTCTCCAAGGAGACCAATGT 813 GAAAGGACGGGATTTTGGGGGCTAA 814 TATGTAGTACCTTGGCTCCGCCCA 815 TCCCTTTCGATGAGCGGCTGTACT 816 AGTACAGCCGCTCATCGAAAGGGA 817 CCCTTTCGATGAGCGGCTGTACT 817 AGTACAGCCGCTCATCGAAAGGGA	25	800	TCCGCCGAAGCACACGCTTATTCG	CGAATAAGCGTGTGCTTCGGCGGA
803 CAGAGGGGACAGCCGTATGCCTTA TAAGGCATACGGCTGTCCCCTCTG 804 CGGTGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 30 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 35 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACGAGCCAATGT ACATTGGCTCGTCTCCTTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		801	AACGGTACGCATTGTGAGCAGTGT	ACACTGCTCACAATGCGTACCGTT
804 CGGTGGTTTTATCGGAATCTGCGA TCGCAGATTCCGATAAAACCACCG 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACGAGCCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		802	TGGCGACTACTGTTCCCCTGAATC	GATTCAGGGGAACAGTAGTCGCCA
30 805 TTGGCCTCCGACCTCACGACATAT ATATGTCGTGAGGTCGGAGGCCAA 806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 35 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		803	CAGAGGGGACAGCCGTATGCCTTA	TAAGGCATACGGCTGTCCCCTCTG
806 CGTTTCGCTAGCATCTGGCGCCGA TCGGCGCCAGATGCTAGCGAAACG 807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		804	CGGTGGTTTTATCGGAATCTGCGA	TCGCAGATTCCGATAAAACCACCG
807 ACTAAGCGGTGGAGCCGGTGGATG CATCCACCGGCTCCACCGCTTAGT 808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACGAGCCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA	30	805	TTGGCCTCCGACCTCACGACATAT	ATATGTCGTGAGGTCGGAGGCCAA
808 ATATTGGCTGCGTTTACGGGCCGC GCGGCCCGTAAACGCAGCCAATAT 809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACGAGCCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		806	CGTTTCGCTAGCATCTGGCGCCGA	TCGGCGCCAGATGCTAGCGAAACG
809 CCGCTATGGTGGCAATCCCGATAC GTATCGGGATTGCCACCATAGCGG 810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACGAGCCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		807	ACTAAGCGGTGGAGCCGGTGGATG	CATCCACCGCTCCACCGCTTAGT
810 GTTGCATGTGGCTCAGGCGGCATA TATGCCGCCTGAGCCACATGCAAC 811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACGAGCCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		808	ATATTGGCTGCGTTTACGGGCCGC	GCGGCCCGTAAACGCAGCCAATAT
811 ATTCTGGGGAGTGACCCAGGGCTT AAGCCCTGGGTCACTCCCCAGAAT 812 CTCTCCAAGGAGACGAGCCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		809	CCGCTATGGTGGCAATCCCGATAC	GTATCGGGATTGCCACCATAGCGG
812 CTCTCCAAGGAGACGAGCCAATGT ACATTGGCTCGTCTCCTTGGAGAG 813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA	35	810	GTTGCATGTGGCTCAGGCGGCATA	TATGCCGCCTGAGCCACATGCAAC
813 GAAAGGACGGGATTTGGGGGCTAA TTAGCCCCCAAATCCCGTCCTTTC 814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		811	ATTCTGGGGAGTGACCCAGGGCTT	AAGCCCTGGGTCACTCCCCAGAAT
814 TATGTAGTACCTTGGCTCGCGCCA TGGCGCGAGCCAAGGTACTACATA 40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		812	CTCTCCAAGGAGACGAGCCAATGT	ACATTGGCTCGTCTCCTTGGAGAG
40 815 TCCCTTTCGATGAGCGGCTGTACT AGTACAGCCGCTCATCGAAAGGGA		813	GAAAGGACGGGATTTGGGGGCTAA	TTAGCCCCCAAATCCCGTCCTTTC
		814	TATGTAGTACCTTGGCTCGCGCCA	TGGCGCGAGCCAAGGTACTACATA
816 TAGATCGGGCAGAGCCCGTATCTT AAGATACGGGCTCTGCCCGATCTA	40	815	TCCCTTTCGATGAGCGGCTGTACT	AGTACAGCCGCTCATCGAAAGGGA
		816	TAGATCGGGCAGAGCCCGTATCTT	AAGATACGGGCTCTGCCCGATCTA

	817	GGAATGCTTTAGGCTGCCGAGCTG	CAGCTCGGCAGCCTAAAGCATTCC
	818	ATGGTAGCAACATTCAACGCCAGG	CCTGGCGTTGAATGTTGCTACCAT
I	819	CTATGAAACGTGTGGCCCAGCAAC	GTTGCTGGGCCACACGTTTCATAG
	820	ATGTTGCTAGTGCCTTTCGGGCCT	AGGCCCGAAAGGCACTAGCAACAT
5	821	CCAATGTGCGCAGACTCAGTCATT	AATGACTGAGTCTGCGCACATTGG
	822	GATAGTGCTCGCAAACGGGCCTTC	GAAGGCCCGTTTGCGAGCACTATC
	823	GCACCCTGTTGCCTCATTGAGCGT	ACGCTCAATGAGGCAACAGGGTGC
	824	GGCGTGAATAGAGTGACCAGGCGG	CCGCCTGGTCACTCTATTCACGCC
	825	ACGTGCCAGCTGCGGGCACTTTAT	ATAAAGTGCCCGCAGCTGGCACGT
10	826	AGTGGAATAGTCGCGTCGTGCCGC	GCGGCACGACGACTATTCCACT
	827	ACTCGCCTATTACCGCTGGATTGG	CCAATCCAGCGGTAATAGGCGAGT
	828	GAGACCGGATTGAGATGATCCCGT	ACGGGATCATCTCAATCCGGTCTC
	829	CTGGCAGTTTACCACCGAACCAGT	ACTGGTTCGGTGGTAAACTGCCAG
	830	TTACATTGCCGATTTCGCATGTGA	TCACATGCGAAATCGGCAATGTAA
15	831	TAAAACTGAAGGGTCGCCTCAGCA	TGCTGAGGCGACCCTTCAGTTTTA
	832	GGCTTCGCATGCCTTTGCAACATT	AATGTTGCAAAGGCATGCGAAGCC
	833	AAGACCGAAGGTCTCTCTGAGGGC	GCCCTCAGAGAGACCTTCGGTCTT
	834	GCCTATGGCTCCAGCTCAGCAGTA	TACTGCTGAGCTGGAGCCATAGGC
	835	CGTATCATAGCGTTCGGTGGACAA	TTGTCCACCGAACGCTATGATACG
20	836	CATGCGCTCGCACTCTGCCTGTCT	AGACAGGCAGAGTGCGAGCGCATG
	837	TGGGCAATTCGGAAACGTCGGTCT	AGACCGACGTTTCCGAATTGCCCA
	838	TTGCGGAGATGCGACGGTACATTG	CAATGTACCGTCGCATCTCCGCAA
	839	ACTTTCGCACGTCGATCTGGACTG	CAGTCCAGATCGACGTGCGAAAGT
	840	CTAACTGCCGCGGCAAACTGATTA	TAATCAGTTTGCCGCGGCAGTTAG
25	841	GGCCGCGGATTTTATTCCTTGGAT	ATCCAAGGAATAAAATCCGCGGCC
	842	GAATTTGGAACGGTGTTCCGATGA	TCATCGGAACACCGTTCCAAATTC
	843	GTCCATCCATCTACGGCATCAGGA	TCCTGATGCCGTAGATGGATGGAC
	844	TAAACGACCTGGCACATGTGCGTA	TACGCACATGTGCCAGGTCGTTTA
	845	CACCATCCAAGAGCCAATCCTAGG	CCTAGGATTGGCTCTTGGATGGTG
30	846	ACTCATATACGATCAGTCCGCCGC	GCGGCGGACTGATCGTATATGAGT
į	847	GTGCCAACCGACGATCAACCGAAC	GTTCGGTTGATCGTCGGTTGGCAC
	848	TGGGGTTCGTACAGGTCGGTTCAT	ATGAACCGACCTGTACGAACCCCA
	849	AACAGTAGAGGCGAGGCCTGCGGG	CCCGCAGGCCTCGCCTCTACTGTT
	850	TGCATCGAATCCGAGATGGATCTT	AAGATCCATCTCGGATTCGATGCA
35	851	GCGTCACGTTATGTCCGCTCTGTC	GACAGAGCGGACATAACGTGACGC
	852	GGGACATGCGTAGCGCAATATCAC	GTGATATTGCGCTACGCATGTCCC
	853	CACACGTCACACCATCCAAAGTGG	CCACTTTGGATGGTGTGACGTGTG
Ĺ	854	ATGCTCAGGTGCTAAATACGGCCA	TGGCCGTATTTAGCACCTGAGCAT
]	<u>855</u>	AAAAATGTTTAGCGCGCTGACTGG	CCAGTCAGCGCGCTAAACATTTTT
40	856	ATAGTCCGTTTCCGTTCCCAACGA	TCGTTGGGAACGGAACGGACTAT
l	857	TCGATCTTCTGGGTTGCAGACCAG	CTGGTCTGCAACCCAGAAGATCGA

	858	GTCGGCGCAGCCGATCCTCATGTC	GACATGAGGATCGGCTGCGCCGAC
	859	GTTGCGGGGTGTCGAAAAGGATCT	AGATCCTTTTCGACACCCCGCAAC
	860	ATCTCTTCCTCGGGTGGATGCCAG	CTGGCATCCACCGAGGAAGAGAT
	861 .	TGATGTGCGTTTCAGCTTTTCGCG	CGCGAAAAGCTGAAACGCACATCA
5	862	GTTAAGGGGTGAGAACATCCGGCC	GGCCGGATGTTCTCACCCCTTAAC
	863	AAGTCGTCTCCCTGCGTCTCGTCC	GGACGAGACGCAGGGAGACGACTT
	864	CCGACCTAATAAGGCGCAACAATG	CATTGTTGCGCCTTATTAGGTCGG
	865	CATCATTGGCACCGTACCAATGCC	GGCATTGGTACGGTGCCAATGATG
	866	TGGAGAAAGGGAAGTGCAGCAACG	CGTTGCTGCACTTCCCTTTCTCCA
10	867	TGGTACTCCTTGTCATGCCTGCCA	TGGCAGGCATGACAAGGAGTACCA
	868	GGCACAGGTTCTCTTGCAGCGCGG	CCGCGCTGCAAGAGAACCTGTGCC
	869	GAATCTGGGCATTGCTACGAGACC	GGTCTCGTAGCAATGCCCAGATTC
	870	CGAAATGGGAGCGTCCACTACCAC	GTGGTAGTGGACGCTCCCATTTCG
	871	ACATATGAGCTCGCGTGCTTGCAT	ATGCAAGCACGCGAGCTCATATGT
15	872	TCGAGCACGGTCACTGATAAAGCC	GGCTTTATCAGTGACCGTGCTCGA
	873	GAGGGTCCCTGCTCAGAGTTGGTT	AACCAACTCTGAGCAGGGACCCTC
	874	AAATGCGATCGCCCCTTATGGAAT	ATTCCATAAGGGGCGATCGCATTT
	875	CTACCGAATGGATTGCGGATGGC	GCCATCCGCAATCCATTCGGGTAG
	876	AGGGACTGGCAGGTCTCTGCGCGT	ACGCGCAGAGACCTGCCAGTCCCT
20	877	TAACGATCCATTCCACGAATGCAG	CTGCATTCGTGGAATGGATCGTTA
	878	GGCCGCACGTACGATTACGCCTTG	CAAGGCGTAATCGTACGTGCGGCC
	879	TGGGGAATGCATCAGTTGTTGGCT	AGCCAACAACTGATGCATTCCCCA
	880	TATCTGGGAGTAGCAGGCAGGCC	GGCCCTGCCTGCTACTCCCAGATA
	881	CCGAAGGTTTCACGCTCAGGTCGC	GCGACCTGAGCGTGAAACCTTCGG
25	882	GAACCCAGCTGGGACATCCTTCAG	CTGAAGGATGTCCCAGCTGGGTTC
	883	TGCATGCGAGCAAATAACCCGGAC	GTCCGGGTTATTTGCTCGCATGCA
	884	AATTGTCCGCCAAACGCTTTTCAG	CTGAAAAGCGTTTGGCGGACAATT
	885	GTCGGCTTCGAGCGATCGAGTGTG	CACACTCGATCGCTCGAAGCCGAC
	886	TCGCGTGCTCTACGTAGCCCATGA	TCATGGGCTACGTAGAGCACGCGA
30	887	GGCTTCCGCGATAACGTAATTCGC	GCGAATTACGTTATCGCGGAAGCC
	888	TGTAGCCGACTAGGGCCGAAGCCC	GGGCTTCGGCCCTAGTCGGCTACA
	889	AAGCGAACGCCCTGGCTGAATATT	AATATTCAGCCAGGGCGTTCGCTT
	890	TGTCACGCGACGTGCTGCAGATTT	AAATCTGCAGCACGTCGCGTGACA
	891	CCGTGTCCGTGTTGTCGACAGGCG	CGCCTGTCGACACACGGACACGG
35	892	CCCCACACGTTGCGCCTATATGTG	CACATATAGGCGCAACGTGTGGGG
	893	GGCGGGCACAACTCAACACAGATG	CATCTGTGTTGAGTTGTGCCCGCC
	894	CGACTGCGGGATCACCGGTGATTA	TAATCACCGGTGATCCCGCAGTCG
	895	TCGGGACATGACCGGTACGGAGTC	GACTCCGTACCGGTCATGTCCCGA
	896	TACCTCGAGTGGCCGTTGATCGGG	CCCGATCAACGGCCACTCGAGGTA
40	897	TAATTCATGGGGCTAGCCGAACCA	TGGTTCGGCTAGCCCCATGAATTA
Į	898	ACACTCTAAGCCGATTCCGTTCGA	TCGAACGGAATCGGCTTAGAGTGT

			
	899	GTGGGCGTGAGTGACACGCACAAA	TTTGTGCGTGTCACTCACGCCCAC
	900	ACGACTCCTCGGGCAAAGTACGTA	TACGTACTTTGCCCGAGGAGTCGT
	901	TGTGGTCATGGCGCTACTGTTTTC	GAAAACAGTAGCGCCATGACCACA
	902	CTTTCGCTAGCCAGAGCGGGTTCC	GGAACCCGCTCTGGCTAGCGAAAG
5	903	ACAGGGCGTGTTAGCGTGTGACAA	TTGTCACACGCTAACACGCCCTGT
	904	GGTACTTCCGGCGTATCGGGCCAC	GTGGCCCGATACGCCGGAAGTACC
	905	GTGGGTTTTGTTCACCCTTCTGGG	CCCAGAAGGGTGAACAAAACCCAC
	906	ACGCAATTCCGCATTACTTACCCG	CGGGTAAGTAATGCGGAATTGCGT
	907	CGCCTCGACTGCGGTCAAGCACAA	TTGTGCTTGACCGCAGTCGAGGCG
10	908	GTGAAATGGATCCAGAGAGGGCCA	TGGCCCTCTCTGGATCCATTTCAC
	909	TATAAACGCTGCAGGGCTCCGTTA	TAACGGAGCCCTGCAGCGTTTATA
	910	GTTATTCAGGCGGCTTGTAACGGG	CCCGTTACAAGCCGCCTGAATAAC
	911	GGGTTCTAGCGTGCGCGTTCAGTT	AACTGAACGCGCACGCTAGAACCC
•	912	TTGGGCTCGAGCGGTACACCACTA	TAGTGGTGTACCGCTCGAGCCCAA
.15	913	CCGTCTTCAGGACAACGGTATGCG	CGCATACCGTTGTCCTGAAGACGG
	914	GGACCCTTTGACAGATTGCGGCAC	GTGCCGCAATCTGTCAAAGGGTCC
	915	TAAATTTTATCGCCAGGCGGCGCT	AGCGCCGCCTGGCGATAAAATTTA
	916	GCCGAACGCAAGATCGCTTGAACT	AGTTCAAGCGATCTTGCGTTCGGC
	917	TAGGCCATTGGTGCCCTAAGACGG	CCGTCTTAGGGCACCAATGGCCTA
20	918	CAAACCACAGCTTACAGGCTGCGT	ACGCAGCCTGTAAGCTGTGGTTTG
	919	TAAACGGAGACTGGCACGGTAGCA	TGCTACCGTGCCAGTCTCCGTTTA
	920	TAGCGCGCATCACACTTGGAATCG	CGATTCCAAGTGTGATGCGCGCTA
	921	TGCTGACACAAACGAGCCGTTTCG	CGAAACGGCTCGTTTGTGTCAGCA
	922	CGCTTAACGGCATTGACTGTCCAC	GTGGACAGTCAATGCCGTTAAGCG
25	923	TTCCACGGCCGTGTATTACGGATA	TATCCGTAATACACGGCCGTGGAA
	924	TTTATGCCGTTGCCGAGGAAGACT	AGTCTTCCTCGGCAACGGCATAAA
	925	AGTGCCGAGATAGGGGACTGGGCG	CGCCCAGTCCCCTATCTCGGCACT
	926	CTAGTCTCCACGCCCTCGGGACGA	TCGTCCCGAGGGCGTGGAGACTAG
	927	CCGCCATTCGGAAGATGGATGATG	CATCATCCATCTTCCGAATGGCGG
30	928	TGACGGTGAAAGTCGATTGCGAAG	CTTCGCAATCGACTTTCACCGTCA
	929	ATATGCGTCACCACCGGTTCCGA	TCGGAACCGGGTGGTGACGCATAT
	930	CCATCAGTGAAGGGGTTGCTGCCA	TGGCAGCAACCCCTTCACTGATGG
	931	CATATGTGCTTGGCTTGCGATGAC	GTCATCGCAAGCCAAGCACATATG
	932	TCTGCTTTGGAAGCCTGAACTGCT	AGCAGTTCAGGCTTCCAAAGCAGA
35	933	CGATTTGGTCAAGAAGGCGGAAAT	ATTTCCGCCTTCTTGACCAAATCG
-	934	ATCAGAGGCCTTCCCGCCTCGTTA	TAACGAGGCGGGAAGGCCTCTGAT
	935	ATTGTTGTCGTTGCCACATCGCAG	CTGCGATGTGGCAACGACAACAAT
	936	TGAAATGTGTCTGGACGCGAGTCT	AGACTCGCGTCCAGACACATTTCA
	937	GCGGCGATGCTCCTTAAAGGGTA	TACCCTTTAAGGAGCATCGCCCGC
40	938	CCGCAATCTCCATGCGTCGACCGT	ACGGTCGACGCATGGAGATTGCGG
	939	TGCCGCGTAATCACCTGGAACTTG	CAAGTTCCAGGTGATTACGCGGCA

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	940	TTCCAGTAGCCAGCGGTAGTGTGA	TCACACTACCGCTGGCTACTGGAA
	941	CTGAATTCCGCCTATTGTTCGGCA	TGCCGAACAATAGGCGGAATTCAG
	942	GCTTGAACCTCGAGGCGATGTTCT	AGAACATCGCCTCGAGGTTCAAGC
	943	CAAGCGTGGAAGTACGACCCGCCA	TGGCGGGTCGTACTTCCACGCTTG
5	944	GTGTGCACTGGATCCGAGCCCTAG	CTAGGGCTCGGATCCAGTGCACAC
	945	TCCCTGGGCTAGCATTGCGAGGTT	AACCTCGCAATGCTAGCCCAGGGA
	946	AGAACCAAAGACGCTTGTTTGCCG	CGGCAAACAAGCGTCTTTGGTTCT
	947	CGTCACATGCAAACGTTCCCTCCC	GGGAGGGAACGTTTGCATGTGACG
	948	TGACCGCATGTGTATTGAGTCGCT	AGCGACTCAATACACATGCGGTCA
10	949	GCGGGCCCAATGAGTATCCGTCAT	ATGACGGATACTCATTGGGCCCGC
	950	TAGTGACTGTGAACGCCCCTGGTT	AACCAGGGGCGTTCACAGTCACTA
	951	GGCACCGTCTGCCGCGCGTATATC	GATATACGCGCGGCAGACGGTGCC
	952	TCGATGCAGTCTTTTTCCCGTCAA	TTGACGGGAAAAAGACTGCATCGA
	953	ACCCGTGGGGTTTCGCCATTTTT	AAAAATGGCGAAACCCCACGGGGT
15	954	CTACACGCGCAGTTGTGACTTGTG	CACAAGTCACAACTGCGCGTGTAG
	955	CGCAGCGACCTCATCTCTGGAGCC	GGCTCCAGAGATGAGGTCGCTGCG
	956	CGACCCAGCACTCCTAAAATCGGT	ACCGATTTTAGGAGTGCTGGGTCG
	957	ACGCGCCGCTCATCACTACAATCT	AGATTGTAGTGATGAGCGGCGCGT
	958	CGCAACTTCCTGTGGCAAAGCCAG	CTGGCTTTGCCACAGGAAGTTGCG
20	959	TCGTTGGGCACATAAGGCAACTGA	TCAGTTGCCTTATGTGCCCAACGA
•	960	CCGCTTGTAATTGCCATTCTCCGT	ACGGAGAATGGCAATTACAAGCGG
	961	GTAACCAGGGAGTCCTGGGCTGTG	CACAGCCCAGGACTCCCTGGTTAC
	962	AGCGCAAGATCTGGGGGCAGTCAC	GTGACTGCCCCAGATCTTGCGCT
	963	GCGTACATCTGCTCATCAGCATGG	CCATGCTGATGAGCAGATGTACGC
25	964	CCTCTGTGGCAGGAAAGAAACCGT	ACGGTTTCTTTCCTGCCACAGAGG
	965	CCTATGCAATGGACCTGCATCGGA	TCCGATGCAGGTCCATTGCATAGG
	966	CTCGGTGGATGGCGAATAAGGATA	TATCCTTATTCGCCATCCACCGAG
·	967	CCTCACTCGTGATGGCGTGACGCA	TGCGTCACGCCATCACGAGTGAGG
	968	TACGCTCACAGAACGCCATACGCC	GGCGTATGGCGTTCTGTGAGCGTA
30	969	CCGGAGAAGTTACGCGGATCGGAC	GTCCGATCCGCGTAACTTCTCCGG
	970	GCGCCCTCACTGCATTTTTGGTAT	ATACCAAAAATGCAGTGAGGGCGC
	971	ACTTTCAGCACGCGAACAGCGCAA	TTGCGCTGTTCGCGTGCTGAAAGT
	972	CTAAACGCCCTTGATGCATGAGCA	TGCTCATGCATCAAGGGCGTTTAG
	973	GCTTGCCTTTTACGATCGTCGCTA	TAGCGACGATCGTAAAAGGCAAGC
35	974	CAGACATCGTACGCACTCGGCATC	GATGCCGAGTGCGTACGATGTCTG
•	975	TAGCCGCGCGCTCCTATGCTCTT	AAGAGCATAGGAGCCGCGCGGCTA
	976	GATGCCCTTTTGGTCCCCATGCCA	TGGCATGGGGACCAAAAGGGCATC
	977	TGAGCTGCCTTGCCACGATGCCTC	GAGGCATCGTGGCAAGGCAGCTCA
	978	CCGCCGTATACGTGCCATAGTTTG	CAAACTATGGCACGTATACGGCGG
40	979	TAGTGCTCTCCGCGCTCATCCAAC	GTTGGATGAGCGCGGAGAGCACTA
	980	CCCTAGATAAGTTGGGGTGGGACG	CGTCCCACCCCAACTTATCTAGGG

	981	TGAAGGCCACCTGATATGGTTTC	GAAACCATATCAGGTGGCCCTTCA
	982	GCCGCCTCCGACTGGTTAACCCGA	TCGGGTTAACCAGTCGGAGGCGGC
	983	CGCACGGCTACTAACAGCGGATCA	TGATCCGCTGTTAGTAGCCGTGCG
	984	CCGGACCAATTCCAACGAGCATCG	CGATGCTCGTTGGAATTGGTCCGG
5	· 985	CATTGAGGTCCACCGTTCACATCC	GGATGTGAACGGTGGACCTCAATG
	986	AGGACGCAGCATGTCCCAGCCGAG	CTCGGCTGGGACATGCTGCGTCCT
	987	TAATCGCGGGCCATACTACCAACG	CGTTGGTAGTATGGCCCGCGATTA
	988	CGCAAATTTCTCCGGTCGGCAAGC	GCTTGCCGACCGGAGAAATTTGCG
	989	GTGGCTCGACTAATGCCTTGCGTG	CACGCAAGGCATTAGTCGAGCCAC
10	990	TGTGGGCGTGTTCCGGCTCACTGT	ACAGTGAGCCGGAACACGCCCACA
	991	GTTCTTCCTTTTCTGCGGTGGGAA	TTCCCACCGCAGAAAAGGAAGAAC
	992	ACCTCGAGTCAGATTGTGCGCCTT	AAGGCGCACAATCTGACTCGAGGT
	993	CAAGTGGACAGACGGTTTGTTCCG	CGGAACAACCGTCTGTCCACTTG
	994	TCCAGTTGAGTCGCGCCGACGAGG	CCTCGTCGGCGCGACTCAACTGGA
15	995	CGCAACAGGTCAGCCCTTATTTGC	GCAAATAAGGGCTGACCTGTTGCG
	996	GCCGTGACTCCTGCAATGTCGGTA	TACCGACATTGCAGGAGTCACGGC
	997	ATCAGCGCAAGCTGGTCTGAAACA	TGTTTCAGACCAGCTTGCGCTGAT
	998	CCCTGGCCAGAACGAGAGGCCATG	CATGGCCTCTCGTTCTGGCCAGGG
	999	ACGATCAAGGACTCGTCAGGGTTG	CAACCCTGACGAGTCCTTGATCGT
20	1000	TTCATGGCACCAAGACCACCGTTA	TAACGGTGGTCTTGGTGCCATGAA
	1001	ACAGCAAGGAGATGGATTGCGACG	CGTCGCAATCCATCTCCTTGCTGT
	1002	CGTAAATATCTGCGGCGGTGTGAA	TTCACACCGCCGCAGATATTTACG
	1003	GGAAACACGTGTTCGTCTGTTGGC	GCCAACAGACGAACACGTGTTTCC
	1004	CGATGTTAGGATTCGGATAGGCCA	TGGCCTATCCGAATCCTAACATCG
25	1005	ATCGGACAAGGACAAGTGGATGGT	ACCATCCACTTGTCCTTGTCCGAT
	1006	GCCCGGAGGACAAAGTTCGAGTTA	TAACTCGAACTTTGTCCTCCGGGC
	1007	AAATCCGACAAATGGGCACATGGA	TCCATGTGCCCATTTGTCGGATTT
	1008	CAGTTAGGGGATGCGGATGAGTGA	TCACTCATCCGCATCCCCTAACTG
	1009	CGGCAGGTGGAGATTCCGACATTG	CAATGTCGGAATCTCCACCTGCCG
30	1010	TAGGGCAGCCAGGTTCACTCATCT	AGATGAGTGAACCTGGCTGCCCTA
	1011	GCACCGTATTAGCAGTAGGCACGC	GCGTGCCTACTGCTAATACGGTGC
	1012	ACGCATTACAGGTGTGCGAAGGGA	TCCCTTCGCACACCTGTAATGCGT
	1013	CGTGACTGCACGTGTTCCACAGGG	CCCTGTGGAACACGTGCAGTCACG
	1014	GCTGAACTACCGCCTAAAATCGCG	CGCGATTITAGGCGGTAGTTCAGC
35	1015	AGCACGCCAGGGAGGATCGAGTTA	TAACTCGATCCTCCCTGGCGTGCT
	1016	ATGAGGGCAAGGAATGGGTCATGC	GCATGACCCATTCCTTGCCCTCAT
	1017	GGGTCTCTCGTAATCAAAGGCCGA	TCGGCCTTTGATTACGAGAGACCC
	1018	TATCTTGCGCAACGCCTCCATTTA	TAAATGGAGGCGTTGCGCAAGATA
	1019	GGTTACACCTACGGAATCCAGCGG	CCGCTGGATTCCGTAGGTGTAACC
40	1020	ACACCGAGTTGGTCCGGTCAATAG	CTATTGACCGGACCAACTCGGTGT
	1021	TCCCAGATTAAACGCTAGCCACCG	CGGTGGCTAGCGTTTAATCTGGGA

1022   TIGGTGAAACTIGCCGTTGGAAG   CTTCCGACGGGCCAGTTTCACCAA   1023   CCAGGGGGGTTGACAATGAGGCTG   CAGCCTCATTGTCAACTCCCCTGG   1024   TCTGCGTTATTGGACCGTTTGTCG   CCACAAACGGTCCAATAACGCAGA   1025   TATGGGATGCTAAACCGGCGTACA   TGTACGCCGGTTTAGCATCCCATA   1026   CACAGACGTCTGTCGGGCTTGTT   ACACAAGCCCGACAGACGCTCTGTG   1027   AGAATGCCGTTCGCCTACTCCCCTT   ACACAAGCCCGACAGACGCATTCT   1028   CGACGGATAATGCAGGCCTACTATGA   TCATGAGGCTGCATTATCCGTCG   1029   ACCCTCTAAACCAATAGGTGGGG   GGCCGACCTATTCCTTTTAGAGGGT   1030   CACTCACGGCAGAAGCCTTGTT   ACAAGCAGGCTTTGCCTTTTTAGAGGGT   1031   ATCAGCCCACATATTCTCGGCCGT   ACAGCAGGCTTCTGCCGTGAGTG   1032   CAAATCTGGGGTGCTCTAAACG   GCGTTTAGGACGACCCCAGATTTC   1032   CAAATCTGGGGTGCTCTAAACG   GCGTTTAGGACGACCCCAGATTTC   1033   TGTCGCCCATGCACACTCACACG   GCGTTTAGGACGACCCCAGATTTC   1034   GGGGGCCCATCAATTCATTATCGA   TCGATAATGAATGATTGGCGCCACA   1034   GGGGGCCCATCAATTCATTATCGA   TCGATCAATGAATTGATGGGCCCCC   1035   GTCGAGCACCGAAGGCTTCACAA   TCGATCAATGAATTGATGGCGCCCC   1035   GTCGAGCACCGAAGGCTCACAA   TTGTGAGCCTTCGGTCTGACC   1036   CCGCTAAGCACCGAAGGCTCACAA   TTGTGAGCCTTCGGTCTGATCGGG   1037   TAGAATTAGCCAAGGGTCACAA   TTGTGAGCCTTTCGGTGATTTCTCA   1038   CACATGACATTTGGCAAGGGTCACAA   TTGTGAGCCTTTCGGTAATTCTC   1038   CACATGACATTTGGCAAGGGTCACAA   TTGTGAGCCTTTCGCTAATTCTC   1039   TCAACGCACTGGCGATGACTAGAT   ATCTAGTCATCGCCGTTGATTCTC   1039   TCAACGCACTGGCGATGACTAGAT   ATCTAGTCATCGCCAGTGCGTTAATTCAC   1039   TCAACGCACTGGCGATGACTAGAT   ATCTAGTCATCGCCAGTGCGTTAATCCCC   1041   ATCAGAGCAAATCTGCAGCGGGA   TCCCCGCTGCAAATTTCCCC   1042   ATTCAGCCTCGCTGACACTATCCCCCAGGGGTA   TCCCCGCTGCAAGATTTCCCC   1043   ATTTCACCTCGCTGACAGTTTCCCC   GGAACGATCAGCAAACAGGCC   1043   ATTTCACCTGCTCCACGGGGGTA   TACCCCTGCACAGACATTTCCCCACTGGCTTCACT   1044   AGTGACCCCGAGTGCACACTCTCCCACGGGGTA   TACCCCTGCGACAGACATCACCGAGCTCACCACACCACA				
1024   TCTGCGTTATTGGACCGTTTGTCG		1022	TTGGTGAAACTGGCCCGTCGGAAG	CTTCCGACGGGCCAGTTTCACCAA
1025		1023	CCAGGGGAGTTGACAATGAGGCTG	CAGCCTCATTGTCAACTCCCCTGG
1026		1024	TCTGCGTTATTGGACCGTTTGTCG	CGACAAACGGTCCAATAACGCAGA
1027		1025	TATGGGATGCTAAACCGGCGTACA	TGTACGCCGGTTTAGCATCCCATA
1028 CGACGGATAATGCAGGCCTCATGA 1029 ACCCTCTAAAGCAATAGGTCGGCG 1029 ACCCTCTAAAGCAATAGGTCGGCG 1030 CACTCACGGCAGAAAGCCTTGCTTGT 1031 ATCAGCCCACATATTCTCGGCCGT 1032 CAAATCTGGGCTGTCTCTAAACGC 1032 CAAATCTGGGCTGTCTCTAAACGC 1033 TGTCGCCCATGGCAGGTTAAATAC 1034 GGGGGCCACATTCATTCATCAC 1035 GTCGACCACTAATTCATTATCGA 1036 CCGCTAAGCACGCTCACAA 1037 TAGAATTAGCGAGGTTAAATAC 1038 CCGCTAAGCACCGAAGGCTCACAA 1037 TAGAATTAGCGAACGGTGATCCACAA 1038 CACATGACACGAACGGTGATCCCG 1039 TCAACGCACGAACGGTGATCCCG 1039 TCAACGCACGAACGGTGATCCCG 1039 TCAACGCACGGACGGTGCCAA 1039 TCAACGCACTGGCAACGGTGCCAA 1040 CGGGAAATGTCTTTAGCCACGGGAC 1041 ATCAGACCACTGCGACATTTCATTATCCCCATTGGCCACTTCCCAATTTCCCA 1042 GGCCTTTTAGCCGACGGGAA 1044 ATCAGAACCAATCTCACACGGGAACGCTCACAA 1045 ATTTCACCTCGCTGATCGCTCCCC 1044 ATCAGACCAATCTGCACCGGGGAA 1044 AGTGACGCCCAGATCCGCGACACCCCCCCCCCCCCCCCC	5	1026	CACAGACGTCTGTCGGGCTTGTGT	ACACAAGCCCGACAGACGTCTGTG
1029 ACCCTCTAAAGCAATAGGTCGGCG CGCCGACCTATTGCTTTAGAGGGT 1030 CACTCACGGCAGAAGCCTGCTTGT ACAAGCAGGCTTCTGCCGTGAGTG 1031 ATCAGCCCACATATTCTCGGCCGT ACGGCCGAGAATATTGTGGGCTGAT 1032 CAAATCTGGGCAGGTCGTCCTAAACGC GCGTTTAGGACGACCCCAGATTTG 1033 TGTCGCCCATGGCAGGTTAAATAC GTATTTAACCTGCCATGGGCGACA 1034 GGGGGCCCATCAATTCATTATCGA 1035 GTCGACCATGCATTCATTATCGA 1036 CCGCTAAGCACCCCAAATTCATTATCGA 1037 TAGAATTAGGGAACGCTCACAA 1038 CACATGACATTCATTATCGA 1038 CACATGACATTTCATTATCGA 1039 TCAACGCACCGAAGGCTCACAA 1039 TCAACGCACTGGAACGGTGATCCCG 1039 TCAACGCACTGGCGATACTAAAGCCTTTGCCAATGTCTA 1040 CGGGAAATGTCTTTTTGCCAACTGGAC 1041 ATCAGAGCAAATCTGCAGCAGGAA 1042 GGCCTTTTTTTTAGCCGTGCAA 1044 ATTAGCACACTGCGCATGAAT 1042 GGCCTTTTTTTTTCCCAACTGGGA 1044 ATTAGCACCCGAAGCCTCCACAATTCCCAGTGCGTTAAA 1044 AGTAGCCCCGAAGCTCCACACCAGTTGGACTAAAGACAATTCCCGA 1043 ATTTCACCTCGCTGACTCCG 1044 ATTAGCAGCCGAGGGTTA 1045 AGTTGCTCACCTGGCGTAAAGACACACAGGCC 1044 AGTAGCCCGAGTCGCGAGGGTTA 1045 AGTTGCTCACCTGGCGTAAAGACACACGCC 1044 AGTAGCCCCAGATCGCGCGGGAA 1044 AGTAGCCCCGAGTCGCGAGGGTTA 1045 AGTTGTCTCACCTGGCGTAAAAGACAACAGGCC 1046 CTTCTTTGTCCAACTGGGCT 1047 CACCTCATCGGAGCACGCGCGACAAGAACAACACACT 1048 ATGCGATCCATGACAAGGGTTGAACACACCC 1048 ATGCGATCCATGACAAGGGTTGCT 1049 CCCCTGGCAAGTGCGCAAGACAACCC 1048 ATGCGATCCATGACAAGGGTTGCT 1049 CCCCTGGCAAGTGTGCCAAAGAAACACC 1050 CCCAATAGACACCCTCGCCGACAT 1049 CCCCTGGCAAGGTGAAAT 1040 CCCCTGGAAGATGAGCAACCC 1051 AACGACCCCTCGCCGAATT 1040 CCCCTGGCAAGAGCACCCTTCCCGAAGACACACT 1051 AACGACCCCTCGCCGAATA 1052 CTCCCCCCGGAAATTT AAACCCCGCACACACACACACACACACACACACACACAC		1027	AGAATGCCGTTCGCCTACTCCCGT	ACGGGAGTAGGCGAACGGCATTCT
1030 CACTCACGGCAGAAGCCTGCTTGT ACAAGCAGGCTTCTGCCGTGAGTG 1031 ATCAGCCCACATATTCTCGGCCGT ACGGCCGAGAATATGTGGGCTGAT 1032 CAAATCTGGGGTCGTCAAACGC GCGTTTAGGACGACCCCAGATTTG 1033 TGTCGCCCATGGCAGGTTAAAACC GTATTTAACCTGCCATGGGCGACA 1034 GGGGGCCCATCATTCATTATCGA TCGATAATGATGGGCGACA 1035 GTCGAGCAGCTTTAGTATCCGA TCGATAATGATGGGCCCCC 1035 GTCGAGCAGCTTTAGTATCCGAG TCGATAATGAAGCTGCTCGAC 1036 CCGCTAAGCACCGAAGGCTCACAA TTGTGAGCCTTCGGTGCTTAGCGG 1037 TAGAATTAGCGAACGGTGATCCCG CGGGATACTAAAGCTGCTAGCGG 1038 CACATGACATTTGGCAAAGGTCCA TTGTGAGCCTTCGCTAATTCTA 1038 CACATGACATTTGGCAAAGGTCCA TGGACCTTTGCCAAATTCTA 1039 TCAACGCACTGGCGATGACTAGAT ATCTAGTCACAGTGCGTTTGACGG 1040 CGGGAAATGTCTTTGGCAAAAGGTCCA TTCGACGGCTAAAGACATTTCCCG 1041 ATCAGAGCAAATCTGCAGCGGGGA TCCCCGCTGCAGATTTGCCCGTTGAC 1042 GGCCTGTTTCTGTCCAACTGGGCT AGCCCAGTTGGACAATTTCCCG 1043 ATTTCACCTCGCTGGATCGCTTCCG CGGAACGATCAGGAAAACAGGCC 1044 AGTGACGCCGAGTCGCGAGGGTTA TAACCCTCGCGACTCGGGGTCACT 1045 AGTTGTCTCATCCTGTCCGGACC GGGTCCCGGACAAGAACAACT 1044 AGTGACGCCGAGTCGCGAGGGTTA TAACCCTCGCGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGACC GGGTCCCGGACAAGAAACAACT 1046 CTTCTTTGTGCAACATTGCCAGGG CCCCTGGCAAAGTGAGACAACT 1047 CACCTCATCGGAGCAAAGAAACCC GGGTTGTCCGAAAGAAACAACT 1048 ATGCGATCCATGACAAGGGTTGCT AGCACCCTTGTCCAACGGG 1049 CCCGTGGAGATGAGCAACCC GGGTTGTCTCCGATGAGGTG 1049 CCCGTGGAGATGAGCAACCC GGGTTGTCTCCAACGGG 1050 CCCAATAGACGCCCCACGCCACTGAACACACT 1051 AACGACCACCGACCCACGCCAGTGA TCACTCGCCTCAACAAGAACACT 1052 GGTGCTTTGTCTGAGGCGAGTGAAA 1054 CTCGCCGGAGTGTTTAACAACACCTCCGCCAACAGCACACC 1055 AGCAATCATGAGAGGGTGAA TCACTCGCCTCAACAAAAACACC 1055 AGCAATCATGAGAGGGTGAAA TCACTCGCCTCAACAAAAACACC 1056 CTTTTGTCTGAGGCGAAAAAAAAAAAAAAAAAAAAAAAA		1028	CGACGGATAATGCAGGCCTCATGA	TCATGAGGCCTGCATTATCCGTCG
10 1031 ATCAGCCCACATATTCTCGGCCGT ACGGCCGAGAATATGTGGGCTGAT 1032 CAAATCTGGGGTCGTCCTAAACGC GCGTTTAGGACGACCCCAGATTTG 1033 TGTCGCCCATGGCAGGTTAAATAC GTATTTAACCTGCCATGGGCGACA 1034 GGGGGCCCATCAATTCATTATCGA TCGATTATGAATTGATGGGCCCCC 1035 GTCGAGCAGCTTTAGTATCCGGG CCCCGGATACTAAAGCTGCTGACG 1036 CCGCTAAGCACCGAAGGCTCACAA TTGTGAGCCTTAGCGG 1037 TAGAATTAGCGAACGGTGATCCCG CGGGATCACAAATGTCATAGCG 1039 TCAACGCACTGGCAGATGTCCCG CGGGATCACCAATGTCATGTG 1039 TCAACGCACTGGCGATGACTAGAT ATCTAGTCATCGCAATGTCATGTG 1040 CGGGAAATGTCTTTAGCCGTCGAA TTCGACCGCTAGCGTTCGAT 1041 ATCACAGCAATGTCTTTAGCCGTCGAA TTCGACCGCTAAGACATTTCCCG 1043 ATTTCACCTCGCTGAA TCCCCGCTGCAATTTCCTCAT 1044 AGTGACGCCCAGTCGCGAACGGTTCACCACCCGATCACGACACAGCCC 1043 ATTTCACCTCGCTGACCTTCCG CGGAACCGACACGGCACCACCACACACACACCC 1046 CTTCTTTGTCCAACTGGCT ACCCCTCGCGACTCAGCGAGTGAACACACC 25 1046 CTTCTTTGTCACACTGCCTCCG CGGCACCTCGCGACTCAGCACAGACACCC 1048 ATGCGACCCAGTAGCACCC GGTCCCGGACCAGAGACAACACT 26 1048 ATGCGACCACACACCCC GGTCCCGGACCACACACACACC 1049 CCCCAATAGACGCCCAGTCACCAGCACAGCACACACACCC 1048 ATGCGACCACACACACCCC GGGTTCCTCGCACACAAGAAC 1049 CCCCAATAACCACCCAGCCACGTA TCACTGCCTGCACACACACACAC 1050 CCCCAATAACCACCCAGCCACTGA TCACTGCCGCACTCACTCGCCGAC 1050 CCCCAATAACCCCCAGCCACTTA TACCCCTCGCCACACACACACCCT 1050 CCCCAATAACCCCCAGCCACTTA TACCCCTCGCCGACTCATTTGGG 1050 CCCCAATAACCCCCAGCCACTTA TACCCCTCGCCGCACTCATTTGGG 1051 AACGACCCCCGCCCCACTTA TACCCCTCGCCGCACTCATTTGGG 1052 GGTGCTTTGTCTGAGGCGAGTGAA TCACTGGCCTCACTATGGC 1053 CTGTCGGCGCTGCTCTCCGCAGTA TACCCCCCCCCACACACCCCCACCCCCCCCCACAC 1053 CTGTCGGCGCTGCTCTCCCGAATTT AAATTCGGAGAGCACCCCCCACACCCCCCCCCC		1029	ACCCTCTAAAGCAATAGGTCGGCG	CGCCGACCTATTGCTTTAGAGGGT
1032 CAAATCTGGGGTCGTCCTAAACGC GCGTTTAGGACGACCCCAGATTTG 1033 TGTCGCCCATGGCAGGTTAAATAC GTATTTAACCTGCCATGGGCGACA 1034 GGGGGCCCATCAATTCATTATCGA TCGATAATGAATTGATGGGCCCCC 1035 GTCGAGCAGCTTTAGTATCGCGGG CCCGCGATACTAAAGCTGCTCGAC 1036 CCGCTAAGCACCGAAGGTCTACAA TTGTGAGCCTTCGGTGCTTAGCGG 1037 TAGAATTAGCGAACGGTGATCCCG CGGATCACCGTTCGGTAATTCTA 1038 CACATGACATTTGGCAAAGGTCCA TGGACCTTTGCCAATTCTA 1038 CACATGACATTTGGCAAAGGTCCA TGGACCTTTGCCAATTCTA 1039 TCAACGCACTGGCATAGATAGAT ATCTAGTCATCGCCAGTGCGTTGA 1040 CGGGAAATGTCTTTAGCCGTCGAA TTCGACCGCTAAAGCACTTTCCCG 1041 ATCAGAGCAAATCTCCAGCGGGAA TCCCCGCTGCAGATTTCCCGA 1042 GGCCTGTTTCTGTCCAACTGGGT AGCCCAGTTGGACAGAAACAGGCC 1043 ATTTCACCTCGCTGATCGCTTCCG CGGAAGCGATCAGCAGAAACAGGCC 1044 AGTGACGCCGAGTCGCCTTCCG CGGAAGCGATCAGCAGAACACGCC 1045 AGTTGTCTCATCTGTCCGGGACC GGTCCCGGACAGGATCAGCAACACAC 1046 CTTCTTTTGTGCACACTTGCCAGG CCCTGGCAACGAAGAACACT 1047 CACCTCATCGGACCATTGCCAGGC CCCTGGCAACGAAGAACACT 1048 ATGCGATCCATGACAAGGGTTCA TAACCCTCGCGACTGCGTCACT 1049 CCCGTGGAGATGACAACCC GGGTTGCTATGCTCCGATGAGGTG 1049 CCCGTGGAGATGATGACACCC GGGTTGCTATGCTCCACGGG 1050 CCCAATAGACGCCACAGCCATCATCTCCCACGGG 1051 AACGACCACGACCCTCGCCGAGTA 1052 GGTGCTTTGTCTGAGCGAGTAA 1053 CTGTCGGGCGCTGCTCTCCGAGTT 1054 CTCCCCGGAAGCCCTCGCCGAGTA 1055 AGCAATCATGAGAGGGTTGA TACTCGGCCTCAGACAAAGACC 1055 AGCAATCATGAGAGGGTGAA TCACTGGCCTCAGACAAAGACC 1055 AGCAATCATGAGAGGGTGAA TCACTGGCCTCAGACAAAGCACC 1055 AGCAATCATGAGAGGGTGAA TCACTGGCCTCAGACAAAGCACC 1056 ATTTGCCACCGGCGACAAAAAGAT AATTCGGAGGAGCACCCTCCCGCGAG 1056 ATTTGCCACCGGCGACAAAAAGAT AATTCGGCGCACCTCCTCATGATTGCT 1057 CCGCCCGGTGTTTGTCAACAAGACT CACCGGCCACCTCTCATGATTGCT 1058 ATTGCCACCGGCGACAAAAAAAAAT AATTTTTTTCACACACGCCGCAAAA 1057 CCGCCCGTGTTTGGCATGTTTTTT CAAAAAAACACTCCGGCGAAT 1057 CCGCCCGCGACAAAAAAAAAAT AATTTTTTTTCCACCAGGCGGCGAAAAAAAAAA		1030	CACTCACGGCAGAAGCCTGCTTGT	ACAAGCAGGCTTCTGCCGTGAGTG
1033 TGTCGCCCATGGCAGGTTAAATAC GTATTTAACCTGCCATGGGCGACA 1034 GGGGGCCCATCAATTCATTATCGA TCGATAATGAATTGATGGGCCCCC 1035 GTCGAGCAGCTTTAGTATCGCGGG CCCGCGATACTAAAGCTGCTCGAC 1036 CCGCTAAGCACCGAAGGCTCACAA TTGTGAGCCTTCGGTGCTTAGCGG 1037 TAGAATTAGCGAACGGTGATCCCG CGGGATACCACGTTCGCTAATTCTA 1038 CACATGACATTTGGCAAAGGTCCA TGGACCTTTGCCAAATTGTA 1039 TCAACGCACTGGCGATGACTCAA TTGTAGCCATAGTGTATGTA 1040 CGGGAAATGTCTTTTAGCCGTCGAA TTCGACGCGTAAAGACATTTCCCG 1041 ATCAGAGCAAATCTGCTAGAA TTCGACGGCTAAAGACATTTCCCG 1042 GGCCTGTTTCTGTCCAACTGGGCT AGCCCAGTTGGACAGAAACAGGCC 1043 ATTTCACCTCGCTGGAA TCCCCGCTGCAGATTTGCTCTGAT 1044 AGTGACGCCGAGTCGCGAGGGGTTA TAACCCTCGCGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACAGGACA	10	1031	ATCAGCCCACATATTCTCGGCCGT	ACGGCCGAGAATATGTGGGCTGAT
1034 GGGGGCCCATCAATTCATTATCGA TCGATAATGAATTGATGGGCCCCC 1035 GTCGAGCAGCTTTAGTATCGCGGG CCCGCGATACTAAAGCTGCTCGAC 1036 CCGCTAAGCACCGAAGGCTCACAA TTGTGAGCCTTCGGTGCTTAGCGG 1037 TAGAATTAGCGAACGGTGATCCCG CGGGATCACCATTCTAACGCGGTGATTCTA 1038 CACATGACATTTGGCAAAGGTCCA TGGACCTTTGCCAAATGTCATGTG 1039 TCAACGCACTGGCGATGACTAGAT ATCTAGTCATCGCCAGTGCGTTGA 1040 CGGGAAATCTTTAGCCGTCGAA TTCAACGCGCTAAAGACATTTCCCG 1041 ATCAGAGCAAATCTGCACCGGGGA TCCCCGCTGAAAGACATTTCCCG 1042 GGCCTGTTTCTGTCCAACTGGGCT AGCCCAGTTGGACAACAGCCC 1043 ATTTCACCTCGCTGACACTTGCC CGGAAGCGATCAGCAGAACAGCC 1044 AGTGACGCCGAGTCGCATCGCTTCCG CGGAAGCGATCAGCAGAACAGCC 1045 AGTTGTCTCATCCTGTCCGGGGCT AGCCCAGTTGGACAGAACAGCC 1046 CTTCTTTGTGCACACTTGCCAGGG CCCTGGCAACTGGCGTCACT 1047 CACCTCATCGGACCATTGCCAGGG CCCTGGCAACTGTGCACAAGAACA 1047 CACCTCATCGGACCATGCACCC GGGTTCCCGGACAGGATCAGCACAACACC 1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGATCGAT 1049 CCCGTGGAGATGATGGCGCTA TAACCCTCGCACATCATCTCCACGGG 1050 CCCAATAGACACCC GGGTTCATTAGCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCGCACATCATCTCCACGGG 1051 AACGACCACGACCCTCGCCGAGTA TACTCGCGCAACACACACC 1052 GGTGCTTTTTCTCGAGGCGAGTGA TCACTGGCTGGCGTCGTTT 1052 GGTGCTTTTTTGCTGCAGAATTT AAATTCGGAGAGAAAAGCACC 1053 CTGTCGGCGCTGCTCCCGAATTT AAATTCGGAGAGAAAAGCACC 1054 CTCCCCGGAGTGTTGTAAGCATTG CAACACCCTCAACAAAACAA		1032	CAAATCTGGGGTCGTCCTAAACGC	GCGTTTAGGACGACCCCAGATTTG
1035 GTCGAGCAGCTTTAGTATCGCGGG CCCGCGATACTAAAGCTGCTCGAC 1036 CCGCTAAGCACCGAAGGCTCACAA TTGTGAGCCTTCGGTGCTTAGCGG 1037 TAGAATTAGCGAACGGTGATCCCG CGGGATCACCGTTCGCTAATTCTA 1038 CACATGACATTTGGCAAAGGTCCA TGGACCTTTGCCAAATGTCATGTG 1039 TCAACGCACTGGCGATGACTAGAT ATCTAGTCATCGCCAGTGCGTTGA 1040 CGGGAAATGTCTTTAGCCGTCGAA TTCGACGGCTAAAGACATTTCCCG 1041 ATCAGAGCAAATCTGCAGCGGGA TCCCCGCTGCAGATTTGCTCTGAT 1042 GGCCTGTTTCTGTCCAACTGGGCT AGCCCAGTTGGAAACAGGCC 1043 ATTCACCTCGCTGAACCACTGGCCT AGCCCAGTTGGACAACAGGACA 1044 AGTGACGCCGAGTCGCGAGGGTTA TAACCCTCGCGACTGGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACAGGACA		1033	TGTCGCCCATGGCAGGTTAAATAC	GTATTTAACCTGCCATGGGCGACA
1036 CCGCTAAGCACCGAAGGCTCACAA TTGTGAGCCTTCGGTGCTTAGCGG 1037 TAGAATTAGCGAACGGTGATCCCG CGGGATCACCGTTCGCTAATTCTA 1038 CACATGACATTTGGCAAAGGTCCA TGGACCTTTGCCAAATGTCATGT 1039 TCAACGCACTGGCGATGACTAGAT ATCTAGTCATCGCCAGTGCGTTGA 1040 CGGGAAATGTCTTTAGCCGTCGAA TTCGACCGCTAAGACATTTCCCG 1041 ATCAGAGCAAATCTGCAGCGGGGA TCCCCGCTGCAGATTTGCTCTGAT 1042 GGCCTGTTTCTGTCCAACTGGGCT AGCCCAGTTGGACAGAAACAGGCC 1043 ATTTCACCTCGCTGATCGCTTCCG CGGAAGCGATCAGCGAGGTGAAAT 1044 AGTGACGCCGAGTCGCGACC GGTCCCGGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCAGCGGGC CCCTGGCAACTGGCGTCACT 1046 CTTCTTTGTGCACACTGCCCAGGG CCCTGGCAAGTGTGCACAAAGAAC 1047 CACCTCATCGAGCACCCAGGG CCCTGGCAAGTGTGCACAAAGAAC 1048 ATGCGACCACAACAACACCC GGTTCATCATCCACAGGGTG 1049 CCCGTGGAAGCATAGCAACCC GGGTTGATCATGCTCCACGGG 1050 CCCAATAGAACGCCACACGCCAGTGA TAAGCCCCTATGCATTGCAT		1034	GGGGCCCATCAATTCATTATCGA	TCGATAATGAATTGATGGGCCCCC
1037 TAGAATTAGCGAACGGTGATCCCG CGGGATCACCGTTCGCTAATTCTA 1038 CACATGACATTTGGCAAAGGTCCA TGGACCTTTGCCAAATGTCATGG 1039 TCAACGCACTGGCGATGACTAGAT ATCTAGTCACCGCAGTGCGTTGA 1040 CGGGAAATGTCTTTAGCCGTCGAA TTCGACGGCTAAAGACATTTCCCG 1041 ATCAGAGCAAATCTGCAGCGGGGA TCCCCGCTGCAGATTTGCTCTGAT 1042 GGCCTGTTTCTGTCCAACTGGGCT AGCCCAGTTGGACAGAAACAGGCC 1043 ATTTCACCTCGCTGATCGCTTCCG CGGAAGCGATCAGCGAGAAACAGGCC 1044 AGTGACGCCGAGTTGCGCGAGGGTTA TAACCCTCGCGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACTCGGCGTCACT 1046 CTTCTTTTGTGCACACTTGCCAGGG 1047 CACCTCATCGAGCACACCC GGGTTGCAAGTTGCACAAAGAAG 1047 CACCTCATCGAGCAACACCC GGGTTGCTATGCTCCGATGAGGTG 1048 ATGCGATCCATGCAAGCACCC GGGTTGCTATGCTCCGATGAGGTG 1049 CCCCGTGGAGCATAGCAACCC GGGTTGCTATTGCTCCACGGG 1050 CCCAATAGACGCCACAGCAGTGA TCACTGGCGTCATTTGGC 30 1051 AACGACCACGACCACTGCCGAGTA TACTCGGCGAGCTCGTTTTTGG 1052 GGTGCTTTGTCTGAGGCGAGTGAA TCACTGGCGTCGGTTATTGGT 1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTCGCCTAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCACACACACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCACACACACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCACACACACCC 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACACCCTCATCATCTCCACGGGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACACCTCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTTGTCGCCGGTGGCGAAT 1057 CCGCCCGTGTTGGCATGCTTTTTG CAAAAGACATCCCGGCGGACAAT 1057 CCGCCCGTGTTGGCATGCTTTTTG CAAAAGACATCCCAACACCGGCGGAAT 1058 ATCGGAAGTGCTGACACACG CGTGTGTCAGCAACACCCCGGCGAAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATCACACCCGGCGACA 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGACCACACAGGGCCGACACAAAAAAACAT ATCTTTTTTTTTT		1035	GTCGAGCAGCTTTAGTATCGCGGG	CCCGCGATACTAAAGCTGCTCGAC
1038 CACATGACATTTGGCAAAGGTCCA TGGACCTTTGCCAAATGTCATGTG 1039 TCAACGCACTGGCGATGACTAGAT ATCTAGTCATCGCCAGTGCGTTGA 1040 CGGGAAATGTCTTTAGCCGTCGAA TTCGACGGCTAAAGACATTTCCCG 1041 ATCAGAGCAAATCTGCAGCGGGGA TCCCCGCTGAGATTTGCTCTGAT 1042 GGCCTGTTTCTGTCCAACTGGGCT AGCCCAGTTGGACAGAAACAGGCC 1043 ATTTCACCTCGCTGATCGCTTCCG CGGAAGCGATCAGCGAGAAAACAGGCC 1044 AGTGACGCCGAGTCGCGAGGGTTA TAACCCTCGCGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACAGGAGAACAAGCACT 1046 CTTCTTTGTGCACACTTGCCAGGG CCCTGGCAAGTGTGACAAAGAAC 1047 CACCTCATCGGAGCATAGCAACCC GGGTCCTATGCTCCGATTGAGAGAAGAG 1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGAGTGA 1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCGTCATTTGGG 1051 AACGACCACGACCCTCGCCGAGTA TCACTGGCTGTGGCGTCGTT 1052 GGTGCTTTGTCTGAGGCGAGTGAA TCACTCGGCTGAGCACACCC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGGAGCACACACACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGGAGCACACACACCC 1055 AGCAATCATGAGAGGTTGCT CAATGCTTACAACACTCCGGCGAG 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGGGCGAAAT 1057 CCGCCCGTGTTGGCATGTTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACACACG CGTGTCCAGCAACACACGGGCGG 1058 ATCGGAAGTGCTGACACACCG CGTGTCCAGCCACACACACACGGGCGG 1058 ATCGGAAGTGCTGACACACAC CGTGTGTCAGCAACACACGGGCGG 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATCAGCACCACAGGGCGG 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATCAGCACCACAGGGCGG 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATCAGCACCACACAGGGCCGACAAAAAAAA	15	1036	CCGCTAAGCACCGAAGGCTCACAA	TTGTGAGCCTTCGGTGCTTAGCGG
1039 TCAACGACTGGCGATGACTAGAT ATCTAGTCATCGCCAGTGCGTTGA 1040 CGGGAAATGTCTTTAGCCGTCGAA TTCGACGGCTAAAGACATTTCCCG 1041 ATCAGAGCAAATCTGCAGCGGGGA TCCCCGCTGCAGATTTGCTCTGAT 1042 GGCCTGTTTCTGTCCAACTGGCT AGCCCAGTTGGACAGAAACAGGCC 1043 ATTTCACCTCGCTGATCGCTTCCG CGGAAGCGATCAGCGAGAAACAGGCC 1044 AGTGACGCCGAGTCGCGAGGGTTA TAACCCTCGCGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACTCGGCGTCACT 1046 CTTCTTTGTGCACACTTGCCAGGG CCCTGGCAAGTGACAAAAGAAG 1047 CACCTCATCGGAGCATAGCAACCC GGTTCCCGAACTGTCCAAAGAAG 1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGATCGCAT 1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCCACACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCGTCATTTGGG 1051 AACGACCACGACCCTCGCCGAGTA TCACTGGCGTCGTTTTTGGG 1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTCGCCTCAGACAAAGAACCC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGGAGCACACACACCC 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCCGGTG CACCGGCCACCTCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTTGTCGCCGGTGGCAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGTGACACACC CGTGTGCAACACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTGTAGCAACACCCGGCGAA 1059 CCTCAGACCCTACTGGGTTGACG CGTCAACCCAGATCAGCACACAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCCGGACCACACACAGGGCCGACACACACAGGGCCGACCACACACAGGGCCGACCCCTTCAAGACACCCCGATACTCCGATACCCAGACCACACAGGGCCGACCACACACA		1037	TAGAATTAGCGAACGGTGATCCCG	CGGGATCACCGTTCGCTAATTCTA
1040 CGGGAAATGTCTTTAGCCGTCGAA TTCGACGGCTAAAGACATTTCCCG 1041 ATCAGAGCAAATCTGCAGCGGGGA TCCCCGCTGCAGATTTGCTCTGAT 1042 GGCCTGTTTCTGTCCAACTGGGCT AGCCCAGATTGGACAGAAACAGGCC 1043 ATTTCACCTCGCTGATCGCTTCCG CGGAAGCGATCAGCGAGAAACAGGCC 1044 AGTGACGCCGAGTCGCGAGGGTTA TAACCCTCGCGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACAGGATGAGACAACT 1046 CTTCTTTGTGCACACTTGCCAGGG CCCTGGCAAGGATGAGACAACACT 1047 CACCTCATCGGAGCATAGCAACCC GGGTTGCTATGCTCCGATGAGAGA 1048 ATGCGATCCATGACAAGGATTGCT AGCAACCCTTGTCATGGATCGCAT 1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCTGTGCTATTGGG 1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGAGGGTCGTTCTT 1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTGGCTGGCGTCTTTTGGT 1053 CTGTCGGCGTGCTCTCCGAATTT AAATTCGGAGAGCACACACACCC 1053 CTGTCGGCGTGCTCTCCGAATTT AAATTCGGAGAGCACACACCCCGAGCAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTTTTTTGCCCCGGTGGCAAT 1057 CCGCCCGTGTTGGCATGTCTTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACAC CGTGTGTCAGCACACACGGGCGG 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGACACACACGGGCGG 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACACACACACACACACACACACA		1038	CACATGACATTTGGCAAAGGTCCA	TGGACCTTTGCCAAATGTCATGTG
20 1041 ATCAGAGCAAATCTGCAGCGGGGA TCCCCGCTGCAGATTTGCTCTGAT 1042 GGCCTGTTTCTGTCCAACTGGGCT AGCCCAGTTGGACAGAAACAGGCC 1043 ATTTCACCTCGCTGATCGCTTCCG CGGAAGCGATCAGCGAGGTGAAAT 1044 AGTGACGCCGAGTCGCGAGGGTTA TAACCCTCGCGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACAGGATGAGACAACT 1046 CTTCTTTGTGCACACTTGCCAGGG CCCTGGCAAGGATGAGACAACACT 1047 CACCTCATCGGAGCATAGCAACCC GGGTTGCTATGCTCCGATGAGGTG 1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGATCGCAT 1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCTGTCATTGGG 1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGGAGGTCGTTTTGGG 1052 GGTGCTTTGTCTGAGGCGAGTGA TTCACTCGCCTCAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCAGCGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGTG CACCGGCCACCCTCCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAAGAT ATCTTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTTTTTG CAAAAGACATGCCAACACGGCGG 1058 ATCGGAAGTGCTGACACACG CGTGTGTCAGCAACACCGGCGG 1058 ATCGGAACTCTTCTGGGTTGACG CGTCAACCCAGACACACACGGGCGG 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACACACACACACACACACACACA		1039	TCAACGCACTGGCGATGACTAGAT	ATCTAGTCATCGCCAGTGCGTTGA
1042 GGCCTGTTTCTGTCCAACTGGGCT AGCCCAGTTGGACAGAAACAGGCC 1043 ATTTCACCTCGCTGATCGCTTCCG CGGAAGCGATCAGCGAGGTGAAAT 1044 AGTGACGCCGAGTCGCGAGGGTTA TAACCCTCGCGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACACGACAGACAACACT 1046 CTTCTTTGTGCACACTTGCCAGGG CCCTGGCAAGTGTGCACAAAGAAG 1047 CACCTCATCGGAGCATAGCAACCC GGGTTGCTATGCTCCGATGAGGTG 1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGATCGCAT 1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCGTCTATTGGG 1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGAGGGTCGTTTTTGGG 1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTCGCCTCAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCACGCCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGCGG 1058 ATTTGCCACCGGCGACAAAAAAGAT ATCTTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACCACCG CGTCTCAGCACACACGGCGGG 1058 ATCGGAAGTGCTGACTGACCACCG CGTCAACCCAGACACACGGCCGA 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACACCCGGACCACACACACACGGCGCACACACACGGGCGCG 1061 GTCCCCATTATCGGTGAGTGCAAC GTTGCACTCACCCGATAATGGGGAC		1040	CGGGAAATGTCTTTAGCCGTCGAA	TTCGACGGCTAAAGACATTTCCCG
1043 ATTTCACCTCGCTGATCGCTTCCG CGGAAGCGATCAGCGAGGTGAAAT 1044 AGTGACGCCGAGTCGCGAGGGTTA TAACCCTCGCGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACAGGATGAGACAACT 1046 CTTCTTTGTGCACACTTGCCAGG CCCTGGCAAGTGTGCACAAAGAAG 1047 CACCTCATCGGAGCATAGCAACCC GGGTTGCTATGCTCCGATGAGGTG 1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGATCGCAT 1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCGTCTATTGGG 1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGAGGGTCGTTTTTGGG 1052 GGTGCTTTGTCTGAGGGCGAGTAA TTCACTCGCCTCAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCAGCGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAAGAT ATCTTTTTGTCGCCGGTGGCCAAT 1057 CCGCCCGTGTTGGCATGTTTTTG CAAAAGACATGCCAACAAGGCGCGGAAT 1058 ATCGGAAGTGCTGACACACG CGTGTGTCAGTCAGCAACACGGGCGG 1058 ATCGGAAGTGCTGACACACG CGTGTGTCAGTCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCCGGACCACACACAGG	20	1041	ATCAGAGCAAATCTGCAGCGGGGA	TCCCCGCTGCAGATTTGCTCTGAT
1044 AGTGACGCCGAGTCGCGAGGGTTA TAACCCTCGCGACTCGGCGTCACT 1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACAGGATGAGACAACT 25 1046 CTTCTTTGTGCACACTTGCCAGGG CCCTGGCAAGTGTGCACAAAGAAG 1047 CACCTCATCGGAGCATAGCAACCC GGGTTGCTATGCTCCGATGAGGTG 1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGATCGCAT 1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCTGTGGCGTCTATTGGG 30 1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGGAGGGTCGTTT 1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTCGCCTCAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCACGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTACACACG CGTGTGTCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCCGGCTGTTC GAACAGCCCGACCACACACAGG		1042	GGCCTGTTTCTGTCCAACTGGGCT	AGCCCAGTTGGACAGAAACAGGCC
1045 AGTTGTCTCATCCTGTCCGGGACC GGTCCCGGACAGGATGAGACACT  1046 CTTCTTTGTGCACACTTGCCAGGG CCCTGGCAAGTGTGCACAAAGAAG  1047 CACCTCATCGGAGCATAGCAACCC GGGTTGCTATGCTCCGATGAGGTG  1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGATCGCAT  1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCGCACATCATCTCCACGGG  1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCGTCTATTGGG  1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGAGGGTCGTGGTCGTT  1052 GGTGCTTTGTCTGAGGCGAGTA TTCACTCGCCTCAGACAAAGCACC  1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGGAGCACCGCACAG  1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG  1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT  35 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT  1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG  1058 ATCGGAAGTGCTGACTGACACACG CGTGTGTCAGTCAGCACTTCCGAT  1059 CCTCAGACCCTATCTGGGTTGACG  CGTCAACCCAGATCAGAGCCCACACAGGG  1060 CTGTGTGGTCCGGCTGTC GAACAGCCGGACCACCACAGGGACCACACAGGGACCACACACAGGGACCACACACAGGGACCACACACAGGGACCACACACAGGACCACACACACACAGGGACCACACACAGGACCACACACAGGGACCACACACAGGACCACACACAGGGACCACACACAGGACCACACACAGGGACCACACACAGGACCACACACAGGACCACACACAGGGACCACACACACAGGGACCACACACAGGGACCACACACAGGGACCACACACAGGGACCACACACAGACACACAGACCACACACAGGGACCACACACAGGACCACACACAGACACACAGACCACACACAGACCACACACACAGACCACACACAGACCACACACAGACCACACACAGACACACACAGACCACACACAGACCACACACACAGACACACACAGACACACACACAGACACACACACACACACACACACACACACACACACACACAC		1043	ATTTCACCTCGCTGATCGCTTCCG	CGGAAGCGATCAGCGAGGTGAAAT
25 1046 CTTCTTTGTGCACACTTGCCAGGG CCCTGGCAAGTGTGCACAAAGAAG 1047 CACCTCATCGGAGCATAGCAACCC GGGTTGCTATGCTCCGATGAGGTG 1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGATCGCAT 1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCTGTGGCGTCTATTGGG 30 1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGAGGGTCGTGTT 1052 GGTGCTTTGTCTGAGGCGAGTGA TTCACTCGCCTCAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCACCACGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTTGTCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATCAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACACGG		1044	AGTGACGCCGAGTCGCGAGGGTTA	TAACCCTCGCGACTCGGCGTCACT
1047 CACCTCATCGGAGCATAGCAACCC GGGTTGCTATGCTCCGATGAGGTG 1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGATCGCAT 1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCTGTGGCGTCTATTGGG 1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGAGGGTCGTGGTCGTT 1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTCGCCTCAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCAGCGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTGTCCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACACACACACACACACACACACA		1045	AGTTGTCTCATCCTGTCCGGGACC	GGTCCCGGACAGGATGAGACAACT
1048 ATGCGATCCATGACAAGGGTTGCT AGCAACCCTTGTCATGGATCGCAT 1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCTGTGGCGTCTATTGGG 1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGAGGGTCGTTGTCTTTGGG 1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTCGCCTCAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCAGCGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTGTTCAGTCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACACACACACACACACACACACA	25	1046	CTTCTTTGTGCACACTTGCCAGGG	CCCTGGCAAGTGTGCACAAAGAAG
1049 CCCGTGGAGATGATGTGCGGCTTA TAAGCCGCACATCATCTCCACGGG 1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCTGTGGCGTCTATTGGG 30 1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGAGGGTCGTTGTCGTT 1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTCGCCTCAGACAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCAGCGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAGGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACACACG CGTGTGCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACACAG		1047	CACCTCATCGGAGCATAGCAACCC	GGGTTGCTATGCTCCGATGAGGTG
1050 CCCAATAGACGCCACAGCCAGTGA TCACTGGCTGTGGCGTCTATTGGG 1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGAGGGTCGTGGTCGTT 1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTCGCCTCAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCAGCGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACCACACG CGTGTCAGCACACACGGGCGG 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACACACACACACACACACACACA		1048	ATGCGATCCATGACAAGGGTTGCT	AGCAACCCTTGTCATGGATCGCAT
1051 AACGACCACGACCCTCGCCGAGTA TACTCGGCGAGGGTCGTGGTCGTT 1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTCGCCTCAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCAGCGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTGTGCAGCACCTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACACGG		1049	CCCGTGGAGATGATGTGCGGCTTA	<del> </del>
1052 GGTGCTTTGTCTGAGGCGAGTGAA TTCACTCGCCTCAGACAAAGCACC 1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCAGCGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTGTGTCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCCGGCTGTTC GAACAGCCGGACCACACAG 40 1061 GTCCCCATTATCGGTGAGTGCAAC GTTGCACTCACCGATAATGGGGAC		1050	CCCAATAGACGCCACAGCCAGTGA	TCACTGGCTGTGGCGTCTATTGGG
1053 CTGTCGGCGCTGCTCTCCGAATTT AAATTCGGAGAGCAGCGCCGACAG 1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 35 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTGTGCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACAG 40 1061 GTCCCCATTATCGGTGAGTGCAAC GTTGCACTCACCGATAATGGGGAC	30	1051	AACGACCACGACCCTCGCCGAGTA	TACTCGGCGAGGGTCGTGGTCGTT
1054 CTCGCCGGAGTGTTGTAAGCATTG CAATGCTTACAACACTCCGGCGAG 1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTGTGTCAGTCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACAG 40 1061 GTCCCCATTATCGGTGAGTGCAAC GTTGCACTCACCGATAATGGGGAC		1052	GGTGCTTTGTCTGAGGCGAGTGAA	TTCACTCGCCTCAGACAAAGCACC
1055 AGCAATCATGAGAGGTGGCCGGTG CACCGGCCACCTCTCATGATTGCT 1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTGTGCAGTCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCTGGTCCGGCTGTTC GAACAGCCGGACCACACAG 40 1061 GTCCCCATTATCGGTGAGTGCAAC GTTGCACTCACCGATAATGGGGAC		1053	CTGTCGGCGCTGCTCTCCGAATTT	AAATTCGGAGAGCAGCGCCGACAG
1056 ATTTGCCACCGGCGACAAAAAGAT ATCTTTTTGTCGCCGGTGGCAAAT 1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTGTGTCAGTCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCCGGCTGTTC GAACAGCCGGACCACACAG 40 1061 GTCCCCATTATCGGTGAGTGCAAC GTTGCACTCACCGATAATGGGGAC		1054	CTCGCCGGAGTGTTGTAAGCATTG	CAATGCTTACAACACTCCGGCGAG
1057 CCGCCCGTGTTGGCATGTCTTTTG CAAAAGACATGCCAACACGGGCGG 1058 ATCGGAAGTGCTGACTGACACACG CGTGTGTCAGTCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCCGGCTGTTC GAACAGCCGGACCACACACAG 40 1061 GTCCCCATTATCGGTGAGTGCAAC GTTGCACTCACCGATAATGGGGAC		1055	AGCAATCATGAGAGGTGGCCGGTG	CACCGGCCACCTCTCATGATTGCT
1058 ATCGGAAGTGCTGACTGACACACG CGTGTGTCAGCACTTCCGAT 1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCCGGCTGTTC GAACAGCCGGACCACACAG 40 1061 GTCCCCATTATCGGTGAGTGCAAC GTTGCACTCACCGATAATGGGGAC	35	1056	ATTTGCCACCGGCGACAAAAAGAT	ATCTTTTTGTCGCCGGTGGCAAAT
1059 CCTCAGACCCTATCTGGGTTGACG CGTCAACCCAGATAGGGTCTGAGG 1060 CTGTGTGGTCCGGCTGTTC GAACAGCCGGACCAGACCA		1057	CCGCCCGTGTTGGCATGTCTTTTG	CAAAAGACATGCCAACACGGGCGG
1060 CTGTGTGGTCCGGCTGTTC GAACAGCCGGACCAGACCA		1058	ATCGGAAGTGCTGACTGACACACG	CGTGTGTCAGTCAGCACTTCCGAT
40 1061 GTCCCCATTATCGGTGAGTGCAAC GTTGCACTCACCGATAATGGGGAC		1059	CCTCAGACCCTATCTGGGTTGACG	CGTCAACCCAGATAGGGTCTGAGG
		1060	CTGTGTGGTCTGGTCCGGCTGTTC	GAACAGCCGGACCAGACCACAG
1062 ACAGGCACGTAAGTGCTCAATCGG CCGATTGAGCACTTACGTGCCTGT	40	1061	GTCCCCATTATCGGTGAGTGCAAC	GTTGCACTCACCGATAATGGGGAC
		1062	ACAGGCACGTAAGTGCTCAATCGG	CCGATTGAGCACTTACGTGCCTGT

	1063	AGCAAGATAGCGGGAGTGCCCCTA	TAGGGCACTCCCGCTATCTTGCT
	1064	GGTTTACGCCATGACATCCCGTCA	TGACGGGATGTCATGGCGTAAACC
	1065	GTGCAGGCCTTTGTGTGTGAATCG	CGATTCACACACAAAGGCCTGCAC
•	1066	CTTCGAGGGTAGGGCTTCGAAACG	CGTTTCGAAGCCCTACCCTCGAAG
5	1067	AGTCGACACTTGGGTTTACCACGG	CCGTGGTAAACCCAAGTGTCGACT
	1068	ACATAAATCTCGCCCGCTGCACTC	GAGTGCAGCGGGCGAGATTTATGT
	1069	GTTTGGTTTTCCACGGAGGTTTGA	TCAAACCTCCGTGGAAAACCAAAC
	1070	GCAGGAACCAGATTAGTGTCCCGG	CCGGGACACTAATCTGGTTCCTGC
	1071	TTTGCTAGAGCGCGGAGCTAAAGC	GCTTTAGCTCCGCGCTCTAGCAAA
10	1072	CTATGTGGCATCGCTGACATGCTC	GAGCATGTCAGCGATGCCACATAG
	1073	CCTAAGTCGGTTTGCAGCTGCTCT	AGAGCAGCTGCAAACCGACTTAGG
	1074	GCGTTCGTCCACAGGAACGGAAGG	CCTTCCGTTCCTGTGGACGAACGC
	1075	TAACCCGCGCCCGAGAAATTGTCT	AGACAATTTCTCGGGCGCGGGTTA
	1076	TATGGTGCTCAGAGCTGTTGCCAA	TTGGCAACAGCTCTGAGCACCATA
15	1077	TCATCGACCCACTAACGTCAGGGC	GCCCTGACGTTAGTGGGTCGATGA
	1078	TGCTCAAGCTACGCGTCACTTCCC	GGGAAGTGACGCGTAGCTTGAGCA
	1079	AGCGGGAAGGTCTGAGGAGGGAAA	TTTCCCTCCTCAGACCTTCCCGCT
	1080	CCGATGTAGCACCACCGCAGTGGC	GCCACTGCGGTGGTGCTACATCGG
	1081	AAGTTCTGGGAATCACACGGCGCG	CGCGCCGTGTGATTCCCAGAACTT
20	1082	CACCAGCCTTACGTGCGGCGTTAA	TTAACGCCGCACGTAAGGCTGGTG
	1083	CGTTTCGCCTCCTCTTCCGAATGC	GCATTCGGAAGAGGAGGCGAAACG
	1084	GAGGAGGCCAATAGAGCAGCGCGC	GCGCGCTGCTCTATTGGCCTCCTC
	1085	AGTAATCTTGCGGCACACAAGCGG	CCGCTTGTGTGCCGCAAGATTACT
	1086	TGAGGACAAACCGCGCGTAGGATA	TATCCTACGCGCGGTTTGTCCTCA
25	1087	TCGTAGAGACGCAGTGCCCATCTC	GAGATGGGCACTGCGTCTCTACGA
	1088	CGAAGCTACACCCCGAGTGCGGTG	CACCGCACTCGGGGTGTAGCTTCG
	1089	ATGATGTGATCTTCCCATGGCTGG	CCAGCCATGGGAAGATCACATCAT
	1090	TGTACACGTATCGCGTTCGCCTAG	CTAGGCGAACGCGATACGTGTACA
	1091	GGTGTGCTTTTACGCATGTACGCA	TGCGTACATGCGTAAAAGCACACC
30	1092	AGGCGGGATACGTGGATGCTAGCC	GGCTAGCATCCACGTATCCCGCCT
	1093	AAATTAGGCACAGCCCTCCCACAG	CTGTGGGAGGGCTGTGCCTAATTT
	1094	ATAAGTTTGGTGAGCCATTCGCGA	TCGCGAATGGCTCACCAAACTTAT
	1095	CCTATTTCGGCGGACCTCGATGCC	GGCATCGAGGTCCGCCGAAATAGG
	1096	TTACCGGAATATGCACTTGGCCGC	GCGGCCAAGTGCATATTCCGGTAA
35	1097	CCTCTCGGACGGTCCCTTTGATCG	CGATCAAAGGGACCGTCCGAGAGG
	1098	CAAGCGAATGCTGTATTACGGCCT	AGGCCGTAATACAGCATTCGCTTG
	1099	GCATTTCCCATGCCAGAACGTTGA	TCAACGTTCTGGCATGGGAAATGC
•	1100	GTTTTGGCTAACCGTCCTGCCTTG	CAAGGCAGGACGGTTAGCCAAAAC
	1101	AGGTTTTGTCCGGGCGAATGATGT	ACATCATTCGCCCGGACAAAACCT
40	1102	ATGTCCACGAGTGCGTCCGATATC	GATATCGGACGCACTCGTGGACAT
	1103	AGACGCGTACGAGGGTTCTGCGCC	GGCGCAGAACCCTCGTACGCGTCT

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	1104	AATACCGTTCCCATCTGTGCGAGG	CCTCGCACAGATGGGAACGGTATT
	1105	ACACAAGGTGCCTCATCGAATGGT	ACCATTCGATGAGGCACCTTGTGT
	1106	GCCGGCAAAATCCTACAAAATCCA	TGGATTTTGTAGGATTTTGCCGGC
	1107	CTTATCCCATGTGCCGGTCTGACT	AGTCAGACCGGCACATGGGATAAG
5	1108	GCGGCCATAATGCATAGCACGGAA	TTCCGTGCTATGCATTATGGCCGC
	1109	TACGGTGCATCGCAGTATGGGTAA	TTACCCATACTGCGATGCACCGTA
	1110	CACCAGATGTCGAGGATCATCGCC	GGCGATGATCCTCGACATCTGGTG
	1111	GCTCCTACGCCCAAAGAGGTATGG	CCATACCTCTTTGGGCGTAGGAGC
	1112	AGAATATGGGCAGCAGCACTC	GAGTGCTGCTGCCCATATTCT
10	1113	CTGCAGTCGCACGCAGTAGACCCG	CGGGTCTACTGCGTGCGACTGCAG
	1114	ATGTCCCTGACCGGAATCTTTCCA	TGGAAAGATTCCGGTCAGGGACAT
	1115	TTCGCCACGAGGCATTAGTCCGAC	GTCGGACTAATGCCTCGTGGCGAA
	1116	ACGTCGTTCCCGAGAATACGGTCT	AGACCGTATTCTCGGGAACGACGT
	1117	ATCCGCTGGCGCTTTGACGAAGAA	TTCTTCGTCAAAGCGCCAGCGGAT
15	1118	TGAACCAAATTCTTACCGCGTGGA	TCCACGCGGTAAGAATTTGGTTCA
	1119	CACGCGTAGGCTGGTGTCATTC	GAATGACACACCAGCCTACGCGTG
	1120	TCGATCCCGCGATCTGGCCTATTG	CAATAGGCCAGATCGCGGGATCGA
	1121	GGAACACTCAACCACCGTGGATCT	AGATCCACGGTGGTTGAGTGTTCC
	1122	TCACACACCAACTGGCCACAGATG	CATCTGTGGCCAGTTGGTGTGA
20	1123	TGTGCTTAGGACACCAGGCAACCC	GGGTTGCCTGGTGTCCTAAGCACA
	1124	GACATTTAACCCGACCGATTGTGC	GCACAATCGGTCGGGTTAAATGTC
	1125	GGCACCGAGCCAGTAGGCCTCTGA	TCAGAGGCCTACTGGCTCGGTGCC
	1126	CTCAAGCGTGCATGTTGGTAACCA	TGGTTACCAACATGCACGCTTGAG
	1127	AGGAAGGCCACCATCCAATATTCG	CGAATATTGGATGGTGGCCTTCCT
25	1128	TACGAACGCCAAGGTTATGCCAAT	ATTGGCATAACCTTGGCGTTCGTA
	1129	CGCACCAGAGTTATGCAGGCTCAA	TTGAGCCTGCATAACTCTGGTGCG
	1130	CCAGCTTGGACGAGGAAGGATGTG	CACATCCTTCCTCGTCCAAGCTGG
	1131	GTCACGCCTTTCAAATGACCCACA	TGTGGGTCATTTGAAAGGCGTGAC
	1132	TGCTAGACCCAGCCCGAGTCTCGG	CCGAGACTCGGGCTGGGTCTAGCA
30	1133	TATTGTGGCACTTGGGTCCAGTGC	GCACTGGACCCAAGTGCCACAATA
	1134	CACGTGTGAGACCGGAAGTGCATC	GATGCACTTCCGGTCTCACACGTG
	1135	GGCAGCCTGATGCTACAGCACCGT	ACGGTGCTGTAGCATCAGGCTGCC
	1136	CGGTCCGTCCATCCTTCAGAGTTA	TAACTCTGAAGGATGGACGGACCG
	1137	CTATTCGCGGACCCTACGCAGTTT	AAACTGCGTAGGGTCCGCGAATAG
35	1138	ACCTGTGCAGTCAGCACGAGTGCG	CGCACTCGTGCTGACTGCACAGGT
	1139	GAGAACCACAGGTGGTCCACCCTA	TAGGGTGGACCACCTGTGGTTCTC
	1140	CCTCGCTAGAGAAATCCACGGGAT	ATCCCGTGGATTTCTCTAGCGAGG
	1141	TAACATCGGTGCAAACCGTGGCGC	GCGCCACGGTTTGCACCGATGTTA
	1142	ACCCAGAAGACATGGCATTCGCCT	AGGCGAATGCCATGTCTTCTGGGT
40	1143	AAAAGCGCTGCTCTAACACCGCCG	CGGCGGTGTTAGAGCAGCGCTTTT
[	1144	CAAGTCTGTCCATTTCCCAACGGT	ACCGTTGGGAAATGGACAGACTTG
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	1145	CCGACACATGGTGGGCTTTTTAAG	CTTAAAAAGCCCACCATGTGTCGG
	1146	ACAGACCAGCTTTTTGCGCAGATT	AATCTGCGCAAAAAGCTGGTCTGT
	1147	CGGCGATCCATTTCACTTCAAAGT	ACTTTGAAGTGAAATGGATCGCCG
	1148	GACGTTATCATGACACAGGTCGCG	CGCGACCTGTGTCATGATAACGTC
5	1149	GGCAGAGTTGGATCGGATCCTCAA	TTGAGGATCCGATCCAACTCTGCC
	1150	CCTCAATGCCACCGAATTCGGTAT	ATACCGAATTCGGTGGCATTGAGG
	1151	GGAGTTAGCGTGATTAGTCGCCCA	TGGGCGACTAATCACGCTAACTCC
	1152	GAACTCGACGTGTCACGGAAGGGT	ACCCTTCCGTGACACGTCGAGTTC
	1153	CACAAGCGACATTTCTGGTGCACG	CGTGCACCAGAAATGTCGCTTGTG
10	1154	CCAGAATGCGTGAATTCGCGTCCT	AGGACGCGAATTCACGCATTCTGG
	1155	CAAGGGAGCCCTGCGAATTAGAGT	ACTCTAATTCGCAGGGCTCCCTTG
	1156	ATTCTTGCTTCGGACGACTAGCCG	CGGCTAGTCGTCCGAAGCAAGAAT
	1157	TGCCACTTTGATTTCCAGATTGCC	GGCAATCTGGAAATCAAAGTGGCA
	1158	GATGGTCGGCAGATAAGTGGTGGG	CCCACCACTTATCTGCCGACCATC
15	1159	GTTCACACGGGTTGACCAACATGT	ACATGTTGGTCAACCCGTGTGAAC
	1160	GATTCAATTGCCCCATTCCTGCAT	ATGCAGGAATGGGGCAATTGAATC
	1161	TACCGGAAACTGAGCCTCGTGCTA	TAGCACGAGGCTCAGTTTCCGGTA
	1162	GGATCTTTACTCAGGGGCAGAGCC	GGCTCTGCCCCTGAGTAAAGATCC
	1163	CGCGAGTGCTTTGTTCTGTGGA	TCCACACAGAACAAAGCACTCGCG
20	1164	GTCGTCGCGATGGCGTACATCCTT	AAGGATGTACGCCATCGCGACGAC
	1165	ACGGGAATCTCCCGAAGTGCGAGC	GCTCGCACTTCGGGAGATTCCCGT
	1166	GGTCGAAATGAGCCAGCAGCAGAT	ATCTGCTGCTGGCTCATTTCGACC
	1167	CCATTGGAATACTGCGTGCGGCTT	AAGCCGCACGCAGTATTCCAATGG
	1168	GGAAGACTTCGCGAGGGCACAATG	CATTGTGCCCTCGCGAAGTCTTCC
25	1169	AGGGTGACTTCGAAGGTCCGAACT	AGTTCGGACCTTCGAAGTCACCCT
	. 1170	TCGTCCCTCTGGTGGTCGAATCAC	GTGATTCGACCACCAGAGGGACGA
	1171	TGTGCAAATTATGCTGGGCGTGAG	CTCACGCCCAGCATAATTTGCACA
	1172	GTCGCCAACTGTCATGTGTGCCCA	TGGGCACACATGACAGTTGGCGAC
	1173	CCTCGAACCCTCAAGACGAAACGA	TCGTTTCGTCTTGAGGGTTCGAGG
30	1174	CTTCATCACGTGACCTTTGTTGCC	GGCAACAAAGGTCACGTGATGAAG
	1175	CCTTCATTCCCAGCAGGATGGCTT	AAGCCATCCTGCTGGGAATGAAGG
	1176	CGGGGACCTCAATGGAGCGTCTTA	TAAGACGCTCCATTGAGGTCCCCG
	1177	CGCCTCTAGCGCTTGTTACGTCGA	TCGACGTAACAAGCGCTAGAGGCG
	1178	CTGCCAGACTCAAAACAGGGACGG	CCGTCCCTGTTTTGAGTCTGGCAG
35	1179	CTCCTTACACCGTGTGAGGGAACC	GGTTCCCTCACACGGTGTAAGGAG
-	1180	TTTCATGCCATATCGCCTCGCGCA	TGCGCGAGGCGATATGGCATGAAA
	1181	GTCTGACTGTCTGCCCTGTATGCG	CGCATACAGGGCAGACAGTCAGAC
	1182	GGTTAATGGAACGGCGTTAACGCG	CGCGTTAACGCCGTTCCATTAACC
	1183	CTTCGCACTGCGGAATCTCAAGCT	AGCTTGAGATTCCGCAGTGCGAAG
40	1184	TGCCAGAGGCGTAGGAGTCCTGGA	TCCAGGACTCCTACGCCTCTGGCA
	1185	GACGGCCAGCCAGTATTAACTCA	TGAGTTAATACTGGCTCGCCCGTC

	1186	GACCTCCAAAGTCAGTCTTGGCGG	CCGCCAAGACTGACTTTGGAGGTC
	1187	CGTTAGAGCATGACCGAACACGTC	GACGTGTTCGGTCATGCTCTAACG
	1188	GTGGGCTCAAAAATTGGGTACGCC	GGCGTACCCAATTTTTGAGCCCAC
	1189	GGGGCAGAGATCACGCGTTCCTCT	AGAGGAACGCGTGATCTCTGCCCC
5	1190	TTTCGCCCTACGAAGCGAAGTTTC	GAAACTTCGCTTCGTAGGGCGAAA
	1191	TACGGGGTGATGTTAAGCTACGCG	CGCGTAGCTTAACATCACCCCGTA
	1192	CCTGTGAGTCTGAGATCGCCGTGT	ACACGGCGATCTCAGACTCACAGG
	1193	ACTGAAGCTGGAACAGGCCATTCG	CGAATGGCCTGTTCCAGCTTCAGT
	1194	AGCACTGGTTCACATGGGAGTCCA	TGGACTCCCATGTGAACCAGTGCT
10	1195	TAAGGAAGATCACACTCCCTGCGC	GCGCAGGGAGTGTGATCTTCCTTA
	1196	CACCACACGCTAAAATTGAAGCCG	CGGCTTCAATTTTAGCGTGTGGTG
	1197	GCTGTCGCCAGGATCATGTATCGT	ACGATACATGATCCTGGCGACAGC
	1198	TTCGTTCGTGCACTGGATTCTTGA	TCAAGAATCCAGTGCACGAACGAA
	1199	TCAGCTCTCCTTGTGCTTGCAGTG	CACTGCAAGCACAAGGAGAGCTGA
15	1200	ACGACGAGGTGAACTTCGTGGGAA	TTCCCACGAAGTTCACCTCGTCGT
	1201	AGCATTGCCGCGGGCCTTGGTTTA	TAAACCAAGGCCCGCGGCAATGCT
	1202	CAGAGGGCAGATGTGACTCCTCAA	TTGAGGAGTCACATCTGCCCTCTG
	1203	CGATATTTCAGCCTCTCAAACGCG	CGCGTTTGAGAGGCTGAAATATCG
	1204	TGCCAGAAATGTTGCCGATTCGAA	TTCGAATCGGCAACATTTCTGGCA
20	1205	TAGGCCACCCGGTGTTCACAATTC	GAATTGTGAACACCGGGTGGCCTA
	1206	GAGAGTCAGACCGAGGGACACGAG	CTCGTGTCCCTCGGTCTGACTCTC
	1207	GAGGCGATCCTGGAACCACGCAAC	GTTGCGTGGTTCCAGGATCGCCTC
	1208	CCAGAGAGGCGGGCTACTGACTCA	TGAGTCAGTAGCCCGCCTCTCTGG
	1209	CACACAGTCCCATCGTACGGCAGT	ACTGCCGTACGATGGGACTGTGTG
25	1210	TTACGTTGCGGAAGCGTGCCTCTA	TAGAGGCACGCTTCCGCAACGTAA
	1211	ATGTACACGCTGCAATCGTGTCCC	GGGACACGATTGCAGCGTGTACAT
	1212	ACTCGTCGTCGGAAGCGCCCAGGT	ACCTGGGCGCTTCCGACGACGAGT
	1213	ATGCGAGAGCAGAATTGAGCCGGT	ACCGGCTCAATTCTGCTCTCGCAT
	1214	AAGTTGGTTCGTATTCACGCGTGC	GCACGCGTGAATACGAACCAACTT
30	1215	TGGGCTTATCGCCGAAGATTGCTA	TAGCAATCTTCGGCGATAAGCCCA
	1216	CAACGGCGAAGACCCAGAATTTTA	TAAAATTCTGGGTCTTCGCCGTTG
	1217	AGCGTACGGCGAAAGTCTAGGGAC	GTCCCTAGACTTTCGCCGTACGCT
	1218	ATGCATCCAGCGTCCCCTTGATTA	TAATCAAGGGGACGCTGGATGCAT
	1219	ACCGTCATCAGTCGCAGGCTTCTG	CAGAAGCCTGCGACTGATGACGGT
35	1220	TCTTGACGGCTGGGCATGATTGGA	TCCAATCATGCCCAGCCGTCAAGA
	1221	TTAACATTCGGACCCAGGACCTGG	CCAGGTCCTGGGTCCGAATGTTAA
	1222	TGGTGTCGAACTCCCTTGCGTGTT	AACACGCAAGGGAGTTCGACACCA
	1223	TACTCCAGTCGCCTGCGCGCAAAC	GTTTGCGCGCAGGCGACTGGAGTA
	1224	CGCAATGCCGTAAGCATGCCAAGC	GCTTGGCATGCTTACGGCATTGCG
40	1225	AGTCCGCGCGAAATACGAACAGTA	TACTGTTCGTATTTCGCGCGGACT
	1226	ATGTTGCACGCGCACTGTATCACA	TGTGATACAGTGCGCGTGCAACAT
			· — · · — ·

	1227	ATCGCCTAACTACCCGCGGCGTGC	GCACGCCGCGGGTAGTTAGGCGAT
	1228	TGGCCAGGGAACACAAGCTCGGTA	TACCGAGCTTGTGTTCCCTGGCCA
	1229	AAACATGGGTCGCGTCTGAGATCA	TGATCTCAGACGCGACCCATGTTT
	1230	GCGAGAGCTGCGATTCCCTTTTAG	CTAAAAGGGAATCGCAGCTCTCGC
5	1231	CCGGCCAAACAAGAGACGAGCGGA	TCCGCTCGTCTCTTGTTTGGCCGG
	1232	AATGGGGCACAGTCTCGCTTGACA	TGTCAAGCGAGACTGTGCCCCATT
	1233	TGTCTCGGGCCTTCAGGACACACT	AGTGTGTCCTGAAGGCCCGAGACA
	1234	TCCACCTTCATTAAGTGGTTCGGC	GCCGAACCACTTAATGAAGGTGGA
	1235	GCTTCGGAATCATCCACCTGTCAT	ATGACAGGTGGATGATTCCGAAGC
10	1236	GAGCCGATGGGCTATCGTCGTCGG	CCGACGACGATAGCCCATCGGCTC
	1237	CACGAATTACGCACGCACAGAGGA	TCCTCTGTGCGTGCGTAATTCGTG
	1238	GCTGTGACGCTCCCCTCAACTAGG	CCTAGTTGAGGGGAGCGTCACAGC
	1239	CGCTCTGAAAACGCGGGCTACGTT	AACGTAGCCCGCGTTTTCAGAGCG
•	1240	GAGTGCTGGACACCGTAGCCAGGA	TCCTGGCTACGGTGTCCAGCACTC
15	1241	CCAACCCCAGTGTAGGCGCAAATG	CATTTGCGCCTACACTGGGGTTGG
	1242	GAAGTAGGGGATGTTGGCCGGCGG	CCGCCGGCCAACATCCCCTACTTC
	1243	CAACGTGGGCACCTGTTTTAGCAG	CTGCTAAAACAGGTGCCCACGTTG
	1244	CTAGCTGCGATCCGAACCTCTACG	CGTAGAGGTTCGGATCGCAGCTAG
	1245	CATTGAACCATCAGCCAAGCTGCG	CGCAGCTTGGCTGATGGTTCAATG
20	1246	AGACTGGCAATTTTTCGAGGCCAA	TTGGCCTCGAAAAATTGCCAGTCT
	1247	CTGGCCGTCCATGAGTTGGTCCAG	CTGGACCAACTCATGGACGGCCAG
	1248	CATGCTGAAACACGGGATTGCCAT	ATGGCAATCCCGTGTTTCAGCATG
	1249	CGATATGTAAGACAGCCGTCGCAA	TTGCGACGGCTGTCTTACATATCG
	1250	AGCGTAACCTACTGGGAAGGCACC	GGTGCCTTCCCAGTAGGTTACGCT
25	1251	GTTCGAACCCCGCGATGTTAAATG	CATTTAACATCGCGGGGTTCGAAC
	1252	GTTGTTAGGAGGCTCGAGGCTGCT	AGCAGCCTCGAGCCTCCTAACAAC
	1253	ACTGGTGCTACGCGGGATATTTGA	TCAAATATCCCGCGTAGCACCAGT
	1254	CTGGGAGCTATCCTCAGCCGAATC	GATTCGGCTGAGGATAGCTCCCAG
	1255	GAACTCGCCGCTGCCGAAGGGTAG	CTACCCTTCGGCAGCGGCGAGTTC
30	1256	TTCGATCGAGGAGCAAGGAGAGTC	GACTCTCCTTGCTCCTCGATCGAA
	1257	GGGGAAAATTGAGGCCTTAGCCAT	ATGGCTAAGGCCTCAATTTTCCCC
	1258	CTAAGGTCAAAGCGCTGTCGCCAG	CTGGCGACAGCGCTTTGACCTTAG
	1259	CCGTAGCGGTGCTCGACCAGGTTC	GAACCTGGTCGAGCACCGCTACGG
	1260	TGGGGACGAATCCGAATGTAGTGA	TCACTACATTCGGATTCGTCCCCA
35	1261	GTCATGTAATTGCATCCCACGGGT	ACCCGTGGGATGCAATTACATGAC
	1262	CTTTGCGCGGTGGTCAATAAAAAG	CTTTTTATTGACCACCGCGCAAAG
	1263	CTCGGGGATGCCCTCTTGGCATTA	TAATGCCAAGAGGGCATCCCCGAG
	1264	CGAAACGTGGTGCAGAAACCTGAA	TTCAGGTTTCTGCACCACGTTTCG
	1265	GGAGTTCACGAGTCGAGCAGTCGC	GCGACTGCTCGACTCGTGAACTCC
40	1266	AGCCGTTTTCAAAGATCTCGACGA	TCGTCGAGATCTTTGAAAACGGCT
	1267	TGGCTGGACATTGTCTGCAATGCA	TGCATTGCAGACAATGTCCAGCCA

	1268	ATCGGCTGCCTCAGTCCCTAATTT	AAATTAGGGACTGAGGCAGCCGAT
	1269	CCAGCATGGAGTTAAGTGAGCGCG	CGCGCTCACTTAACTCCATGCTGG
	1270	TTCATATTTACGAATGCCGGGTGC	GCACCGGCATTCGTAAATATGAA
	1271	CGAAATCGCACAGGAATTCGCGTC	GACGCGAATTCCTGTGCGATTTCG
5	1272	GGCAATTTCGGGACACTCGTTTCA	TGAAACGAGTGTCCCGAAATTGCC
	1273	TTTGTGATTGGGGGTATAACCCGA	TCGGGTTATACCCCCAATCACAAA
•	1274	CCCAGCTAATCCAGCTTGGGCTGT	ACAGCCCAAGCTGGATTAGCTGGG
	1275	AAAATCGTTTGGCTGTAACGTCGC	GCGACGTTACAGCCAAACGATTTT
	1276	AGGAGATTCATCGACTTCCGGGAA	TTCCCGGAAGTCGATGAATCTCCT
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	1278	GCGCAACAAGTAGCCTACCGAGGC	GCCTCGGTAGGCTACTTGTTGCGC
	1279	TAGCAGGCTGATGCCGTCTACACA	TGTGTAGACGGCATCAGCCTGCTA
	1280	GCAAGCGGCGATCGTACAACTTGT	ACAAGTTGTACGATCGCCGCTTGC
	1281	GCACCTCTGGTAAGCCTGAAAGGG	CCCTTTCAGGCTTACCAGAGGTGC
15	1282	CGAGGCGGTGAGTGCATACCGTG	CACGGTATGCACTCACCGCCCTCG
	1283	GGATTAACCGGAACTGCCCTTCTG	CAGAAGGCAGTTCCGGTTAATCC
	1284	GATATTGGGTCCGGCGCGCATTAC	GTAATGCGCGCCGGACCCAATATC
	1285	GGCCTTTAATCTCCGGTCGCAATG	CATTGCGACCGGAGATTAAAGGCC
	1286	AACCTTAGTGCGGCTAGGTGGGGT	ACCCCACCTAGCCGCACTAAGGTT
20	1287	CACGCTGACGCCAGTGTGGTGAGG	CCTCACCACACTGGCGTCAGCGTG
	1288	GGTTCCCTTGACCCACCGAATTGA	TCAATTCGGTGGGTCAAGGGAACC
	1289	TTCTGACAACATCGACCCTGGCTC	GAGCCAGGGTCGATGTTGTCAGAA
	1290	GCGAGCGAAGATAATCCCCAAACT	AGTTTGGGGATTATCTTCGCTCGC
	1291	GTACTCTGTGCAACGGTCCCGAGT	ACTCGGGACCGTTGCACAGAGTAC
25	1292	ACACGCCAGGAACAGTGTCTGTGA	TCACAGACACTGTTCCTGGCGTGT
	1293	AAGGGAATTTAGCGCGCGTGACTT	AAGTCACGCGCGCTAAATTCCCTT
	1294	TGACGTACGCGTTTTAAGTGGGGA	TCCCCACTTAAAACGCGTACGTCA
	1295	CTTAGAGGGACGAGGCCATGAATG	CATTCATGGCCTCGTCCCTCTAAG
	1296	GGACGACTCCGCAAAAAAGGTCGT	ACGACCTTTTTTGCGGAGTCGTCC
30	1297	TCAATCCCAACATCCAAAGCCTCA	TGAGGCTTTGGATGTTGGGATTGA
	1298	GCACTGGTCTACCAAGCTTGTCCC	GGGACAAGCTTGGTAGACCAGTGC
	1299	ACTTGTCGGAAACGAGACCGAGCA	TGCTCGGTCTCGTTTCCGACAAGT
	1300	TCAGGAAAGGCCTAAAGGCGAAAG	CTTTCGCCTTTAGGCCTTTCCTGA
	1301	GGAATGTAGTCAAGGAGGACGGGG	CCCCGTCCTCCTTGACTACATTCC
35	1302	GCACGTGGTAAATGAATTGGCGAG	CTCGCCAATTCATTTACCACGTGC
	1303	GATCATCAGGGGTTATGCGTCGCG	CGCGACGCATAACCCCTGATGATC
	1304	CTCACTCATTCTGATTGCCCGCGG	CCGCGGCAATCAGAATGAGTGAG
	1305	GGGGTGATCTCTCGAACGTCACCC	GGGTGACGTTCGAGAGATCACCCC
	1306	AAGGTTGCTGCTAGCGTACCTCGA	TCGAGGTACGCTAGCAGCAACCTT
40	1307	TATAGATCGCCCAACAGGCAGGAG	CTCCTGCCTGTTGGGCGATCTATA
	1308	GTTTGGACCTGTTGGGAGTGGGCA	TGCCCACTCCCAACAGGTCCAAAC

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1312 CGGTTCGCTACGGCGGCTGGTTTC GAAACCAGCCGCCCCCCCCCC	EGTAGCGAACCG CCGAAACCTGG ETGTAAGGTCGT EATTTAACGCGA TTTCTTTCTGG EGGCGATGTATC AGTGTGATCTC TTCCGCGAAGT ETGCAGCTCGG GCCTTGTGGAA TCCAGTTTGCT ECGACATAGCG
1313 CCAGGTTTCGGTTAGTCGCGCTAG CTAGCGCGACTAA  1314 ACGACCTTACACTCGGATCCGACG CGTCGGATCCGACG  1315 TCGCGTTAAATGGACCAAGGGGCC GGCCCCTTGGTCC  1316 CCAGAAAGAAAATGGCGCCCGGAT ATCCGGGCGCCAT  1317 GATACATCGCCGCCTGCTAGGCAC GTGCCTAGCAGGC  1318 GAGATCACACTCGGAAACCGGATG CATCCGGTTTCCG  1319 ACTTCGCGGAAAAAGGCTGGCATT AATGCCAGCCTTT  1320 CCGAGCTGCACGAGCACACAAAGT ACTTTGTGTGCTCC  1321 TTCCACAAGGCGGCATAGTGAGGC GCCTCACTATGCC  1322 AGCAAACTGGAATCCGGAAAAACC GGTTTTTCCGGAT  15 1323 CGCTATGTCGCAGCATGCATTTAC GTAAATGCATGCTC	CCGAAACCTGG TGTAAGGTCGT ATTTAACGCGA TTTCTTTCTGG EGGCGATGTATC AGTGTGATCTC TTCCGCGAAGT ETGCAGCTCGG GCCTTGTGGAA TCCAGTTTGCT ECGACATAGCG
1314 ACGACCTTACACTCGGATCCGACG CGTCGGATCCGACG  1315 TCGCGTTAAATGGACCAAGGGGCC GGCCCCTTGGTCC  1316 CCAGAAAGAAAATGGCGCCCGGAT ATCCGGGCGCCAT  1317 GATACATCGCCGCCTGCTAGGCAC GTGCCTAGCAGGC  1318 GAGATCACACTCGGAAACCGGATG CATCCGGTTTCCG  1319 ACTTCGCGGAAAAAGGCTGGCATT AATGCCAGCCTTT  1320 CCGAGCTGCACGAGCACACAAAGT ACTTTGTGTGCTCC  1321 TTCCACAAGGCGGCATAGTGAGGC GCCTCACTATGCC  1322 AGCAAACTGGAATCCGGAAAAACC GGTTTTCCGGAT  15 1323 CGCTATGTCGCAGCATGCATTTAC GTAAATGCATGCTC	ATTTAACGCGA TTTCTTTCTGG EGGCGATGTATC AGTGTGATCTC TTCCGCGAAGT ETGCAGCTCGG GCCTTGTGGAA TCCAGTTTGCT ECGACATAGCG
1315 TCGCGTTAAATGGACCAAGGGGCC GGCCCCTTGGTCC 1316 CCAGAAAGAAAATGGCGCCCGGAT ATCCGGGCGCCAT 1317 GATACATCGCCGCCTGCTAGGCAC GTGCCTAGCAGGC 10 1318 GAGATCACACTCGGAAACCGGATG CATCCGGTTTCCG 1319 ACTTCGCGGAAAAAGGCTGGCATT AATGCCAGCCTTT 1320 CCGAGCTGCACGAGCACAAAGT ACTTTGTGTGCTCC 1321 TTCCACAAGGCGGCATAGTGAGGC GCCTCACTATGCC 1322 AGCAAACTGGAATCCGGAAAAACC GGTTTTTCCGGAT 15 1323 CGCTATGTCGCAGCATGCATTTAC GTAAATGCATGCTC	ATTTAACGCGA TTTCTTTCTGG EGGCGATGTATC AGTGTGATCTC TTCCGCGAAGT ETGCAGCTCGG GCCTTGTGGAA TCCAGTTTGCT ECGACATAGCG
1316 CCAGAAAGAAAATGGCGCCCGGAT ATCCGGGCGCCAT 1317 GATACATCGCCGCCTGCTAGGCAC GTGCCTAGCAGGC  1318 GAGATCACACTCGGAAACCGGATG CATCCGGTTTCCG 1319 ACTTCGCGGAAAAAGGCTGGCATT AATGCCAGCCTTT 1320 CCGAGCTGCACGAGCACACAAAGT ACTTTGTGTGCTCC 1321 TTCCACAAGGCGGCATAGTGAGGC GCCTCACTATGCC 1322 AGCAAACTGGAATCCGGAAAAACC GGTTTTTCCGGAT 15 1323 CGCTATGTCGCAGCATGCATTTAC GTAAATGCATGCTC	EGGCGATGTATC AGTGTGATCTC TTCCGCGAAGT ETGCAGCTCGG GCCTTGTGGAA TCCAGTTTGCT ECGACATAGCG
1317 GATACATCGCCGCCTGCTAGGCAC GTGCCTAGCAGGC  1318 GAGATCACACTCGGAAACCGGATG CATCCGGTTTCCG  1319 ACTTCGCGGAAAAAGGCTGGCATT AATGCCAGCCTTT  1320 CCGAGCTGCACGAGCACACAAAGT ACTTTGTGTGCTCC  1321 TTCCACAAGGCGGCATAGTGAGGC GCCTCACTATGCC  1322 AGCAAACTGGAATCCGGAAAAACC GGTTTTTCCGGAT  15 1323 CGCTATGTCGCAGCATGCATTTAC GTAAATGCATGCTC	AGGCGATGTATC AGTGTGATCTC AGTGTGAGAGT AGTGCAGCTCGG AGCCTTGTGGAA AGCCAGTTTGCT AGCGACATAGCG
1318 GAGATCACACTCGGAAACCGGATG CATCCGGTTTCCG  1319 ACTTCGCGGAAAAAGGCTGGCATT AATGCCAGCCTTT  1320 CCGAGCTGCACGAGCACACAAAGT ACTTTGTGTGCTCC  1321 TTCCACAAGGCGGCATAGTGAGGC GCCTCACTATGCC  1322 AGCAAACTGGAATCCGGAAAAACC GGTTTTTCCGGAT  15 1323 CGCTATGTCGCAGCATGCATTTAC GTAAATGCATGCTC	AGTGTGATCTC TTCCGCGAAGT GTGCAGCTCGG GCCTTGTGGAA TCCAGTTTGCT GCGACATAGCG
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1024 /1010/10000/10001101// /1010/1000/1000	
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1326 ACTTGCAACTTCGGCCGTTTGACT AGTCAAACGGCCG	AAGTTGCAAGT
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1344 TGATCGAGGACGGCTTGGTAGCCT AGGCTACCAAGCC	GTCCTCGATCA
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	1351	TCGGACTGGAAGTAACTCGCATGA	TCATGCGAGTTACTTCCAGTCCGA
	1352	GTAGGGTCAAGCACGATTGAAGCC	GGCTTCAATCGTGCTTGACCCTAC
	1353	CACCGCCGTTCGACTAACGTGAC	GTCACGTTAGTCGAACCGCCGGTG
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	1356	GCGGACCTGGGTTAATTGACGCGC	GCGCGTCAATTAACCCAGGTCCGC
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	1358	TTGCGTCAGCGCATCTGCTCGATT	AATCGAGCAGATGCGCTGACGCAA
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	1360	TCAACGGTAAAGAATCGCCCCGCA	TGCGGGGCGATTCTTTACCGTTGA
	1361	CGCGATTGACTGAACCACACCTCT	AGAGGTGTGGTTCAGTCAATCGCG
	1362	GCGTGAAAGATGACGGCCGGTATA	TATACCGGCCGTCATCTTTCACGC
	1363	CATGATTCCACCTCGATCGGCTAG	CTAGCCGATCGAGGTGGAATCATG
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	1365	ATGCCGTGTTCATCTTGATGGTCC	GGACCATCAAGATGAACACGGCAT
	1366	TTCGTGGAGGGACTTTGGAGATCC	GGATCTCCAAAGTCCCTCCACGAA
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	1368	AGCGTGCGCTTGGCTATAAGGCTA	TAGCCTTATAGCCAAGCGCACGCT
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	1370	TTTAGCCGCTGCGACTGTAGGAAA	TTTCCTACAGTCGCAGCGGCTAAA
	1371	ACTGTGTCGCAATCAACCCGCAAA	TTTGCGGGTTGATTGCGACACAGT
	1372	TGCAGCCAATGCGGAACTTAGAGG	CCTCTAAGTTCCGCATTGGCTGCA
	1373	CCCGCTATCCCGGTCTTGCAGTTC	GAACTGCAAGACCGGGATAGCGGG
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	1375	CGTACGGACATCGATGACGCAACG	CGTTGCGTCATCGATGTCCGTACG
	1376	AGTCTCCCGAGAAACGCATAAGGC	GCCTTATGCGTTTCTCGGGAGACT
	1377	AGGAAGTGGATGAACGCGGCTGCA	TGCAGCCGCGTTCATCCACTTCCT
	1378	GGGTTGCTCACCCTCGTCATCAGG	CCTGATGACGAGGGTGAGCAACCC
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	1380	CTCCTCACTTCCAAGCTGCGGATA	TATCCGCAGCTTGGAAGTGAGGAG
	1381	TCAATAGCACCTAGCATGCTCCCG	CGGGAGCATGCTAGGTGCTATTGA
	1382	TGATTCCTGCGCTTTCACAGGTCG	CGACCTGTGAAAGCGCAGGAATCA
	1383	GTATGTGCGGGATGGAAATCACGC	GCGTGATTTCCATCCCGCACATAC
35	1384	TACGGCAACTGTCGATACGAGGGC	GCCCTCGTATCGACAGTTGCCGTA
	1385	GGTTCCCTATCCAGCACTCCTCGC	GCGAGGAGTGCTGGATAGGGAACC
	1386	ATAAGCGCGCCACAGGTATGTACC	GGTACATACCTGTGGCGCGCTTAT
	1387	GAAAGTCGCCAACAGACTCGAGCA	TGCTCGAGTCTGTTGGCGACTTTC
	1388	CGCTAATGCCTCATAGGCGTGTGC	GCACACGCCTATGAGGCATTAGCG
40	1389	ATCCCGCCGCACGAAGTACCAAG	CTTGGTACTTCGTGCGGCGGGAT
	1390	GACGCTGCTGATGGCTTTATCGAT	ATCGATAAAGCCATCAGCAGCGTC
'			

	1391	CTCTCCCGTCGCTTCAGAGATTA	TAATCTCTGAAGCGACGGGGAGAG
	1392	TCATGTGGGCCGTCGTATCAGTTT	AAACTGATACGACGGCCCACATGA
	1393	GGCCTGAAGGTGAATGGTTACGTG	CACGTAACCATTCACCTTCAGGCC
	1394	AGCCTCCAAAGCCGGTAGAGTTCC	GGAACTCTACCGGCTTTGGAGGCT
5	1395	TTGTCGTAGGCGCTCACCTTAGGA	TCCTAAGGTGAGCGCCTACGACAA
	1396	GCCTGAGTCCGGGTCGGGAAAGAA	TTCTTTCCCGACCCGGACTCAGGC
	1397	GGCACTATACCGGTTCTGGACGCG	CGCGTCCAGAACCGGTATAGTGCC
	1398	CCGTGTATACGGAAAGGTACGCCA	TGGCGTACCTTTCCGTATACACGG
	1399	CCCAAGGCAAGTGTGCATCAGTCC	GGACTGATGCACACTTGCCTTGGG
10	1400	GGAGTGCATCATGGCCAAATCTGG	CCAGATTTGGCCATGATGCACTCC
	1401	CCATGTTACGTCTGCGCACCACAG	CTGTGGTGCGCAGACGTAACATGG
	1402	GGCGTTGAGCTTAAAAGCAGCGAC	GTCGCTGCTTTTAAGCTCAACGCC
	1403	TTGGCACTCTGCAAGATACGTGGG	CCCACGTATCTTGCAGAGTGCCAA
	1404	GATCTGCACTGCAAGGTCTTGGGG	CCCCAAGACCTTGCAGTGCAGATC
15	1405	CGATCAACTTGCGGCCATTCCTGC	GCAGGAATGGCCGCAAGTTGATCG
	1406	CGGCTGGGGTCACAGAAACGAGTA	TACTCGTTTCTGTGACCCCAGCCG
	1407	GCGGCTAGTTGTACCTAGCGGCTG	CAGCCGCTAGGTACAACTAGCCGC
	1408	TCGTCACTGTTAGAGAGGCCTCCG	CGGAGGCCTCTCTAACAGTGACGA
	1409	AGTGTCGTGAGCCCTAGCGGCGCT	AGCGCCGCTAGGGCTCACGACACT
20	1410	AGGACGCAGGGATTCAAGTGCAAC	GTTGCACTTGAATCCCTGCGTCCT
	1411	ACCGATGCGCGGTCGGTCTCATAC	GTATGAGACCGACCGCGCATCGGT
•	1412	GGCAGAGGGTTAGGGGGTTTTTTT	AAAAAACCCCCTAACCCTCTGCC
	1413	GGCAAAGGGTGTTTATGGGAGACC	GGTCTCCCATAAACACCCTTTGCC
	1414	ACAAGGCTTCGGCTGGCAGAATAC	GTATTCTGCCAGCCGAAGCCTTGT
25	1415	CATATCCGTTCCTATCGCCAGACG	CGTCTGGCGATAGGAACGGATATG
	1416	AAGCCTTTGTGGCCAAGGCCGCGT	ACGCGGCCTTGGCCACAAAGGCTT
	1417	CCGAACCATGGCTTTATCCAGTGT	ACACTGGATAAAGCCATGGTTCGG
	1418	GTTCAGCAGTAGCTCCCTCGA	TCGAGGAGGAGCTACTGCTGAAC
	1419	GCGCAGTGACACCATGATGCTTTC	GAAAGCATCATGGTGTCACTGCGC
30	1420	ACGATCCATTTTGCCAGCATGCAA	TTGCATGCTGGCAAAATGGATCGT
	1421	TCCCTTCATTTCGGGTTTTTAGCC	GGCTAAAAACCCGAAATGAAGGGA
	1422	TCTTCTTGCCCACATTCCCTTTTG	CAAAAGGGAATGTGGGCAAGAAGA
•	1423	TGCCTTTTGATTGGTGGTCACGGT	ACCGTGACCACCAATCAAAAGGCA
	1424	GACCCTCACGGTCATCAGAGGGAG	CTCCCTCTGATGACCGTGAGGGTC
35	1425	CCGTTCAACACAGTGATACACGCG	CGCGTGTATCACTGTGTTGAACGG
	1426	CACCAGGGGATAGGTGCGGTACGC	GCGTACCGCACCTATCCCCTGGTG
	1427	GGTCGGAACTGATCTGTGCGATCC	GGATCGCACAGATCAGTTCCGACC
	1428	TGCTCCTTCCTAGGGTCATCCGTG	CACGGATGACCCTAGGAAGGAGCA
	1429	GTGGACTTTGACGCCGGCTACCGC	GCGGTAGCCGGCGTCAAAGTCCAC
40	1430	CTGATCTGTCGGCGGTTACTTGCC	GGCAAGTAACCGCCGACAGATCAG
	1431	AGAGGAGCGGAAAAAACCGGACGA	TCGTCCGGTTTTTTCCGCTCCTCT

	1432	GCGACGAAGATCCAGCAAGCTC	GAGCTTGCTGGATCTCTTCGTCGC
	1433	GGGACTTCCAGCTGAGGGACGAAA	TTTCGTCCCTCAGCTGGAAGTCCC
	1434	GGCGCACTCCAATACCCACTGTTT	AAACAGTGGGTATTGGAGTGCGCC
	1435	GCGCTTGGAGACTGTCAGGACGTG	CACGTCCTGACAGTCTCCAAGCGC
5	1436	CAAACCGCTGGTTTCTCCACCTGT	ACAGGTGGAGAAACCAGCGGTTTG
	1437	GCGATTGCTTGGGATCGGTGACTA	TAGTCACCGATCCCAAGCAATCGC
	1438	CTCAGCGACATTTTTCTGGTGGCG	CGCCACCAGAAAAATGTCGCTGAG
	1439	CAGCGGCGTCGTTTACTCAGGACT	AGTCCTGAGTAAACGACGCCGCTG
	1440	GACAGCCGTGAACGCTCAGCCGTT	AACGGCTGAGCGTTCACGGCTGTC
10	1441	GGGCCGTAGAGGCATCGGGTAAAG	CTTTACCCGATGCCTCTACGGCCC
	1442	CGCCGCTCACCTGCTTAAAGCATT	AATGCTTTAAGCAGGTGAGCGGCG
	1443	TGCCAAATCGCAACTCTTGAGACA	TGTCTCAAGAGTTGCGATTTGGCA
	1444	CCCCGATCGGGTGTAATTCTCCCT	AGGGAGAATTACACCCGATCGGGG
	1445	CAAGGTCCAGGTGACGCAACCACT	AGTGGTTGCGTCACCTGGACCTTG
15	1446	CGAGCCTTCAGTGGTATGCATGCG	CGCATGCATACCACTGAAGGCTCG
	1447	CAGCAGCGTGCCCATCTCGACTTA	TAAGTCGAGATGGGCACGCTGCTG
	1448	CGGACCAAGATGGCAGTAATCCAG	CTGGATTACTGCCATCTTGGTCCG
	1449	CTACCACGCTCTGCGCGGGCTGTA	TACAGCCCGCGCAGAGCGTGGTAG
	1450	ACGTGGTTAGGCATGAGCTGCGTC	GACGCAGCTCATGCCTAACCACGT
20	1451	CGACATATCCGACATGACCGGATG	CATCCGGTCATGTCGGATATGTCG
	1452	GCGCCCAGGCTGTGTTAGAAAATA	TATTTTCTAACACAGCCTGGGCGC
	1453	AGCTGGGACTCCGGACCTTGAGTG	CACTCAAGGTCCGGAGTCCCAGCT
	1454	CGGTCGTAACCGCTGCTACAACTT	AAGTTGTAGCAGCGGTTACGACCG
	1455	TCGTTCCTCTGGAACAATTCAGCA	TGCTGAATTGTTCCAGAGGAACGA
25	1456	CGGCATCTCCGGACAAAGGTTAAC	GTTAACCTTTGTCCGGAGATGCCG
	1457	TATCTTGTCGAGCGCCACTCGGAG	CTCCGAGTGGCGCTCGACAAGATA
	1458	TGCAAGGGAGAAAGCCCCATGAGC	GCTCATGGGGCTTTCTCCCTTGCA
	1459	ACTGCATAGCCCAGATCCGCTTGC	GCAAGCGGATCTGGGCTATGCAGT
	1460	TGTGATTCAGTCGAAGCAAGGCCG	CGGCCTTGCTTCGACTGAATCACA
30	1461	CATCCATCTACAATTCGGGCCAGT	ACTGGCCCGAATTGTAGATGGATG
	1462	ATGAGCCGTTCAGAAAGCCAAAGA	TCTTTGGCTTTCTGAACGGCTCAT
	1463	ACACTGGAATTGCTAGACCCCGCG	CGCGGGGTCTAGCAATTCCAGTGT
	1464	CTGAGCTGCGTGGGACAACTCCGC	GCGGAGTTGTCCCACGCAGCTCAG
	1465	CAGCTACTAGGGCGCGATGTACCC	GGGTACATCGCGCCCTAGTAGCTG
35	1466	ATAATGATGGGACGAGAAGGCCCC	GGGGCCTTCTCGTCCCATCATTAT
•	1467	CGACCGAGTGTTACGACATGGTGC	GCACCATGTCGTAACACTCGGTCG
	1468	TGCAGTACCCGCCGCTCCACTAGT	ACTAGTGGAGCGGCGGGTACTGCA
	1469	ATGCTAGCGCGCCTGTCAACGTAC	GTACGTTGACAGGCGCGCTAGCAT
	1470	AGACTCACTGCCGGCTGATCAAAT	ATTTGATCAGCCGGCAGTGAGTCT
40	1471	GCCTGGTGCGAAGATAGGGATTCC	GGAATCCCTATCTTCGCACCAGGC
	1472	GGAAAGTTGGCGGATCCGAGCACT	AGTGCTCGGATCCGCCAACTTTCC

	1473	GGCAGTGAGCAATGTGTGACGAGG	CCTCGTCACACATTGCTCACTGCC
	1474	TGAGGTCCTCCCGGCGGACTACGA	TCGTAGTCCGCCGGGAGGACCTCA
	1475	CTCGCCTTAGATCGTGGTTCCGCA	TGCGGAACCACGATCTAAGGCGAG
	1476	GTCGAGGAATATCATCGCAGCCAG	CTGGCTGCGATGATATTCCTCGAC
_. 5	1477	GCGAATGCAACGAGACAAGAAGGA	TCCTTCTTGTCTCGTTGCATTCGC
	1478	TTCGCCACCAAGTCGGCATTTGTT	AACAAATGCCGACTTGGTGGCGAA
	1479	CGGTGGCTGACACTTGCCGGATTC	GAATCCGGCAAGTGTCAGCCACCG
	1480	CAAGGAGCAATCAGATGGTCGGAG	CTCCGACCATCTGATTGCTCCTTG
	1481	GTGACCCGGTCCGTTCTAGCTGTG	CACAGCTAGAACGGACCGGGTCAC
10	1482	CTCTCGCCCACATAACTGCACAAA	TTTGTGCAGTTATGTGGGCGAGAG
	1483	AAACCTGCCTAAGCAAGCACTGGA	TCCAGTGCTTGCTTAGGCAGGTTT
	1484	TTCCATATTGTACCCCGCGCATGC	GCATGCGCGGGGTACAATATGGAA
i	1485	TGCTTGCGATATCACGATACTGCG	CGCAGTATCGTGATATCGCAAGCA
	1486	TTAGTGTTCGAGCCTTGAGCCGGC	GCCGGCTCAAGGCTCGAACACTAA
15	1487	CTTGTTGCGCGAGTCCGTCTGGGA	TCCCAGACGGACTCGCGCAACAAG
	1488	GTCAGCTGCCTGCTGGTGCTCTTC	GAAGAGCACCAGCAGGCAGCTGAC
	1489	CATCCCTCGAGGTGTAGGCAACAC	GTGTTGCCTACACCTCGAGGGATG
	1490	CAGATGCACTCCGACGGGATTCAG	CTGAATCCCGTCGGAGTGCATCTG
	1491	CTGAGCCTCGCGAAGCTGTGGCAT	ATGCCACAGCTTCGCGAGGCTCAG
20	1492	GCTATGCCACGCCGCAGATAGAGC	GCTCTATCTGCGGCGTGGCATAGC
	1493	AACACCAACCATACCGTCCGTTCA	TGAACGGACGGTATGGTTGGTGTT
	1494	GCCCAGAGCTAAAGCATGTCTGGG	CCCAGACATGCTTTAGCTCTGGGC
	1495	AATGCTGCAATGCTAGCGTCGCTA	TAGCGACGCTAGCATTGCAGCATT
	1496	TCCGGACGCAGTATCCAATCCGGA	TCCGGATTGGATACTGCGTCCGGA
25	1497	TAAGACCATGTGGCACCAAGGTGC	GCACCTTGGTGCCACATGGTCTTA
	1498	ACAGCCACACACGCGCCCACTA	TAGTGGCCCCGTGTGTGTGCTGT
	1499	TAGAACCGAGCACGGCGCCTTGTA	TACAAGGCGCCGTGCTCGGTTCTA
	1500	TTCGAGTAAGCTGGCAGGACCACT	AGTGGTCCTGCCAGCTTACTCGAA
ļ	1501	CTTTCGCAGGTTCGCAGACAATCC	GGATTGTCTGCGAACCTGCGAAAG
30	1502	TACGTCCTGTGCTGTTGACACCGG	CCGGTGTCAACAGCACAGGACGTA
ĺ	1503	GTTCGGGTCAATGTTTCGGGGAGA	TCTCCCGAAACATTGACCCGAAC
	1504	CCCTGTTGTGAAGGGGTTTTGTGA	TCACAAAACCCCTTCACAACAGGG
	1505	GGCAGATTGGTGAACCCCAGATAA	TTATCTGGGGTTCACCAATCTGCC
	1506	CCCTCGGTGTGTTCAAGCCAAATC	GATTTGGCTTGAACACACCGAGGG
35	1507	CCCGCGAACATTTGAACAGCTTAA	TTAAGCTGTTCAAATGTTCGCGGG
	1508	CCGTGTCAGTTGCTCCCTGGCACG	CGTGCCAGGGAGCAACTGACACGG
į	1509	TCCGTCTCAGCCGCCTCCCTATCC	GGATAGGGAGGCGGCTGAGACGGA
	1510	ATAGCTGGGTCACCACAGGCGGTC	GACCGCCTGTGGTGACCCAGCTAT
	1511	ATAGGCAAGCGGTGTAGCACAGCG	CGCTGTGCTACACCGCTTGCCTAT
40	1512	TTAGAAGCCGGTCTGGATTTGCGT	ACGCAAATCCAGACCGGCTTCTAA
Ĺ	1513	TGCCGACCTTTACCAGGATCCTCG	CGAGGATCCTGGTAAAGGTCGGCA
		<del></del>	

į	1514	GCCCACACTATAACCAAGCTGGCA	TGCCAGCTTGGTTATAGTGTGGGC
	1515	TTGCGCCACTAGTACGGATCTCAA	TTGAGATCCGTACTAGTGGCGCAA
	1516	CTTGCAGTTTATGCTGACCCGTCC	GGACGGGTCAGCATAAACTGCAAG
	1517	TGCCTCCAAATTACTTACCGCCGT	ACGGCGGTAAGTAATTTGGAGGCA
5	1518	CCCGTATGCGGAAGCTATGGGCTA	TAGCCCATAGCTTCCGCATACGGG
	1519	TCGTTCAACCCCACACTTCAGTTG	CAACTGAAGTGTGGGGTTGAACGA
	1520	CAATGTGGGGGACATTTCAAGGTT	AACCTTGAAATGTCCCCCACATTG
	1521	TAGCGTCGCACAAATGGCTGACCG	CGGTCAGCCATTTGTGCGACGCTA
	1522	GGTGGCTTCGTGACAATATCGGCC	GGCCGATATTGTCACGAAGCCACC
10	1523	CAGCGGCGTCCGAAATTGGCTCTC	GAGAGCCAATTTCGGACGCCGCTG
	1524	GGCTTGCTCTCGTTTTTGATTGCA	TGCAATCAAAAACGAGAGCAAGCC
	1525	ATGCGAGGAGGACACGACCGTTCC	GGAACGGTCGTGTCCTCCCCAT
	1526	CCTGTTCACTACGACCCACGGGAA	TTCCCGTGGGTCGTAGTGAACAGG
	1527	GTGCCACGGAGTGCGACTGTTGCT	AGCAACAGTCGCACTCCGTGGCAC
15	1528	ACACATCCAAGTCTGACGATGGCC	GGCCATCGTCAGACTTGGATGTGT
	1529	CAGCCCGAAAGGAAAGCCTCCGTG	CACGGAGGCTTTCCTTTCGGGCTG
	1530	AACTGAATGTAGGTGGGCCCCTGT	ACAGGGCCCACCTACATTCAGTT
	1531	ATTTTCGACGATAAGCTGGCCGGT	ACCGGCCAGCTTATCGTCGAAAAT
	1532	TGAGGGAGAACCCGAAATCTGCTT	AAGCAGATTTCGGGTTCTCCCTCA
20	1533	GGCGACTACATCCCCAATTGCTTG	CAAGCAATTGGGGATGTAGTCGCC
	1534	GCAGACGCGGCCTTCCATACTTTT	AAAAGTATGGAAGGCCGCGTCTGC
	1535	ACAACCACATGACGTGTAGCTGCA	TGCAGCTACACGTCATGTGGTTGT
	1536	CTGCTGGGCGCGCAAAGCTTGTTG	CAACAAGCTTTGCGCGCCCAGCAG
	1537	AAGCCTTCTTTGGCTTGCTCCGCT	AGCGGAGCAAGCCAAAGAAGGCTT
25	1538	TACCTGCTGCCTGGAGCAAGGCAT	ATGCCTTGCTCCAGGCAGCAGGTA
	1539	GACGCCGCAGCCATGAGTGAGTGT	ACACTCACTCATGGCTGCGGCGTC
	1540	AGTTGGCCGCTTATTTTGCTCACC	GGTGAGCAAAATAAGCGGCCAACT
	1541	CCAGGCGCCTTCGACAGATCCTCA	TGAGGATCTGTCGAAGGCGCCTGG
	1542	GTGTCCCCTCCAGCTAGCCAGTTT	AAACTGGCTAGCTGGAGGGGACAC
30	1543	GACAACAAGCCAAGGTGACACGTC	GACGTGTCACCTTGGCTTGTTGTC
	1544	CTACACCGCTCGTGACTCGGCAAA	TTTGCCGAGTCACGAGCGGTGTAG
	1545	TGGTGCCATCAAAGCACGTTGTAC	GTACAACGTGCTTTGATGGCACCA
	1546	ACAATGCGTGTTGCGAAACGCATA	TATGCGTTTCGCAACACGCATTGT
	1547	TTGTCCAGCCATTGTATTTTGCGC	GCGCAAAATACAATGGCTGGACAA
35	1548	ACGAGAGATAGCGGACTCCTCCGA	TCGGAGGAGTCCGCTATCTCTCGT
	1549	AGCTTTGTCGTCAGGCGAGCTCTT	AAGAGCTCGCCTGACGACAAAGCT
	1550	GACAGTCGGCGTGCAGTTTGTTGT	ACAACAAACTGCACGCCGACTGTC
	1551	AGCTAGCGACGGCCAACTCACGTA	TACGTGAGTTGGCCGTCGCTAGCT
	1552	CTCCTGTTCGGGGCCGTTACTGGT	ACCAGTAACGGCCCCGAACAGGAG
40	1553	ACTGACCGACGCAGTGCCACATAG	CTATGTGGCACTGCGTCGGTCAGT
	1554	AGGTAGGGTCTGGTTTGACTCGCA	TGCGAGTCAAACCAGACCCTACCT

	1555	CCTCCATTITAGCGCGTTGCCAAT	ATTGGCAACGCGCTAAAATGGAGG
	1556	TTCTTAGGATCCGCGCACTCTTGG	CCAAGAGTGCGCGGATCCTAAGAA
	1557	GTCGAAGGTGTCTACCGTGCGCAG	CTGCGCACGGTAGACACCTTCGAC
	1558	GTCACTCGGCGGCCCAATCACTCG	CGAGTGATTGGGCCGCCGAGTGAC
5	1559	TCTCGGTCACCCGTCTTGACCCTT	AAGGGTCAAGACGGGTGACCGAGA
	1560	GCCCTCGACGAACTCATCCTGAAC	GTTCAGGATGAGTTCGTCGAGGGC
	1561	TCCGGCGTACTCTGACACGGCGAT	ATCGCCGTGTCAGAGTACGCCGGA
	1562	AGCCAAATGCTTTCGTGGTTCGGA	TCCGAACCACGAAAGCATTTGGCT
	1563	ACTCCACGCCGCATGTTGCTGTGA	TCACAGCAACATGCGGCGTGGAGT
10	1564	GCTTCGAGTCGGTGGCATCTGTAT	ATACAGATGCCACCGACTCGAAGC
	1565	GGTCTTGGGCCATCGACTTGCTGC	GCAGCAAGTCGATGGCCCAAGACC
	1566	GGTATCGGACTGCACTAAGGGCAA	TTGCCCTTAGTGCAGTCCGATACC
	1567	AGCCCATGCGTTCCGGATGATTTG	CAAATCATCCGGAACGCATGGGCT
	1568	GCCAGGGTTAAAAGTGATGGGCTC	GAGCCCATCACTTTTAACCCTGGC
15	1569	GACGACGTGCTGGCTACGAAGGGG	CCCCTTCGTAGCCAGCACGTCGTC
	1570	TCCTATTGACCGTGCATCGTGATC	GATCACGATGCACGGTCAATAGGA
	1571	ACCCGCCTCGACTCCACAACTAAA	TTTAGTTGTGGAGTCGAGGCGGGT
	1572	GATGTGGATCACGACCTGCCAGTA	TACTGGCAGGTCGTGATCCACATC
	1573	GTGCCATTGCCACCCATAATGCGT	ACGCATTATGGGTGGCAATGGCAC
20	1574	TTAGCCTGTGCACCCAGTCAGGAG	CTCCTGACTGGGTGCACAGGCTAA
	1575	TCCGATGGGAGAGGCTGATCTCAC	GTGAGATCAGCCTCTCCCATCGGA
	1576	CACTACTGAAGTGGCCTGGCGCTG	CAGCGCCAGGCCACTTCAGTAGTG
	1577	TGCGGCCATAGCGATGTGATAGAT	ATCTATCACATCGCTATGGCCGCA
	1578	GATTGCGCTTAACGGAGATGCACG	CGTGCATCTCCGTTAAGCGCAATC
25	1579	TCACGTTTGACAACGCCAAGCATT	AATGCTTGGCGTTGTCAAACGTGA
	1580	GCATTGTTTGCTAAAGGCGGCATT	AATGCCGCCTTTAGCAAACAATGC
	1581	AGTCGCTCTACGCGTGCAACGCTG	CAGCGTTGCACGCGTAGAGCGACT
	1582	TAGCTCCATGGAGGTCCGAAAGGG	CCCTTTCGGACCTCCATGGAGCTA
	1583	GACCGGTTGGACCTCACTGGCTTC	GAAGCCAGTGAGGTCCAACCGGTC
30	1584	AAGCCGGACAGTCAATGTGCGTAT	ATACGCACATTGACTGTCCGGCTT
	1585	TGCCTCGCTGAGTTCTTCACCGTG	CACGGTGAAGAACTCAGCGAGGCA
	1586	TCGTAGACCTTGCTTTTGGGCTCA	TGAGCCCAAAAGCAAGGTCTACGA
	1587	ACCGCTATGCGCCCTACAAAGCAT	ATGCTTTGTAGGGCGCATAGCGGT
	1588	TAGCGTCACCGTAGCTTGGGGCAG	CTGCCCAAGCTACGGTGACGCTA
35	1589	CTCTCAGCAACTGATGGCACCGGA	TCCGGTGCCATCAGTTGCTGAGAG
	1590	AAAGGAAATGTGGTGCTGGC	GCCGACCAGCACCACATTTCCTTT
	1591	CCGGCTTAGATGGAGAACAAGTGC	GCACTTGTTCTCCATCTAAGCCGG
	1592	AAGTAAATCGCCTCGCCCAAACCG	CGGTTTGGGCGAGGCGATTTACTT
	1593	TGGGCTGTTCAGCCTACCGGACGT	ACGTCCGGTAGGCTGAACAGCCCA
40	1594	GTTTCGGTTCAGCCATGGGCCTAC	GTAGGCCCATGGCTGAACCGAAAC
	1595	GGCCAACATTTCTAGGGGAGTGCC	GGCACTCCCCTAGAAATGTTGGCC

	1596	TTCTTCGTTGGGATTGTCCTCACC	GGTGAGGACAATCCCAACGAAGAA
	1597	TGCACATTGGGGTACGGATCTGAC	GTCAGATCCGTACCCCAATGTGCA
	1598	GGCAGTTAGACGGCAAACTGCAGG	CCTGCAGTTTGCCGTCTAACTGCC
	1599	CGCGTCAGGCTATGAATGGCTCTT	AAGAGCCATTCATAGCCTGACGCG
5	1600	GCTGAATGCAAACCTCGGAGCCAT	ATGGCTCCGAGGTTTGCATTCAGC
	1601	CGCTCTGGCGGATTCATTGTTTTC	GAAAACAATGAATCCGCCAGAGCG
	1602	TTTTCAATCAACCCTCCGGACGTA	TACGTCCGGAGGGTTGATTGAAAA
	1603	GTGGTGGAGTCTGAAGCACGACAG	CTGTCGTGCTTCAGACTCCACCAC
	1604	AAACAGGTCCGGATGATGTCTGGA	TCCAGACATCATCCGGACCTGTTT
10	1605	GTACCGCGTGTACGCCACCGTTAG	CTAACGGTGGCGTACACGCGGTAC
	1606	TCCAACCTACATTTGCGGAAGGAA	TTCCTTCCGCAAATGTAGGTTGGA
	1607	GACGTACCGTCGTCCCGTGAGTTG	CAACTCACGGGACGACGGTACGTC
	1608	GGCAATCCTACAACCGACGCTGAT	ATCAGCGTCGGTTGTAGGATTGCC
	1609	GGCGGCTGCAGGGTCTACATCGAG	CTCGATGTAGACCCTGCAGCCGCC
15	1610	ATACTACGCTGCAGCTGCGCGGC	GCCCGCGCAGCTGCAGCGTAGTAT
	1611	GGATCGCAATCCCTCCGATGACGA	TCGTCATCGGAGGGATTGCGATCC
	1612	TGGCCTTGCACGGGAGCCGAATCT	AGATTCGGCTCCCGTGCAAGGCCA
	1613	AGGTGCCGACGAAACGACGAATAT	ATATTCGTCGTTTCGTCGGCACCT
	1614	GCTGTTTCACCGTCGTCGTTGTTG	CAACAACGACGACGGTGAAACAGC
20	1615	CGGTCCCAATGTTACAACCCAGAC	GTCTGGGTTGTAACATTGGGACCG
	1616	GCAATTCCAGCCACTTTTGACCAA	TTGGTCAAAAGTGGCTGGAATTGC
	1617	ACGGCCAAAGCTCGGTACGGATA	TATCCGTACCGAGCTTTCGCCCGT
	1618	CGACCCGACTTTTGCTTTCGAGTG	CACTCGAAAGCAAAAGTCGGGTCG
	1619	AATTCAGTGTTTGCGTCATGGTCG	CGACCATGACGCAAACACTGAATT
25	1620	CCTGTATGAGGTTCTGGGTCGGCT	AGCCGACCCAGAACCTCATACAGG
	1621	TGGCATACTTGGTGCAAACGCCGT	ACGGCGTTTGCACCAAGTATGCCA
	1622	TCGCCAGTACAGAAACATGCGGGC	GCCCGCATGTTTCTGTACTGGCGA
	1623	CCCGCTGTTGCTCTCATCGTGGAG	CTCCACGATGAGAGCAACAGCGGG
	1624	GCCACAATCTGACCCTGGGAATCA	TGATTCCCAGGGTCAGATTGTGGC
30	1625	GCTCAGTCTCGGAAGTTTCGGCTA	TAGCCGAAACTTCCGAGACTGAGC
	1626	CTTCACGGGCCAACGACGGTCGAG	CTCGACCGTCGTTGGCCCGTGAAG
	1627	CGACAGTTCCGTCCGTCTTGAGGA	TCCTCAAGACGGACGGAACTGTCG
	1628	ACGGAGACGCAGTCGAAACGTCCC	GGGACGTTTCGACTGCGTCTCCGT
	1629	CATGCATCCGATTAAGGGGATCAC	GTGATCCCCTTAATCGGATGCATG
35 .	1630	ATTGCGGGAGTCCCTAGCTTTCTG	CAGAAAGCTAGGGACTCCCGCAAT
	1631	GTGTGGAAGATGCAATTGGAACGG	CCGTTCCAATTGCATCTTCCACAC
	1632	ATACAACGGTAGGTGACAGGGGCG	CGCCCTGTCACCTACCGTTGTAT
	1633	GCCGTGGGAGTAAGGGTACAAAGG	CCTTTGTACCCTTACTCCCACGGC
	1634	GCACGTAGGTCGGCTACTACTCGG	CCGAGTAGTAGCCGACCTACGTGC
40	1635	ACTGTGATCTCTTGGGCAAAGGGC	GCCCTTTGCCCAAGAGATCACAGT
	1636	CATGCCTGAACAATCTCGCATCCC	GGGATGCGAGATTGTTCAGGCATG

	1637	GAGCCTGGCTCCACAGCTGTGCTC	GAGCACAGCTGTGGAGCCAGGCTC
	1638	CTTTCGATACCATCGTTGGCGATC	GATCGCCAACGATGGTATCGAAAG
	1639	CCCGGAGGTGAGGCATTGAATATG	CATATTCAATGCCTCACCTCCGGG
	1640	CTCATTCAGCTAAAAGCGGCTGGA	TCCAGCCGCTTTTAGCTGAATGAG
5	1641	GAAATGCCCTGGGGACTTTTTGCC	GGCAAAAAGTCCCCAGGGCATTTC
	1642	TTTGCCTTCACAACAGACGCAGCA	TGCTGCGTCTGTTGTGAAGGCAAA
	1643	AAATCCCAAGACGTCGGGGCGTAT	ATACGCCCGACGTCTTGGGATTT
	1644	CAACGGCGGTAGCTAAACCGTAA	TTACGGTTTAGCTACCGCCCGTTG
	1645	GGCCAACGACAATGCGAAACCTTC	GAAGGTTTCGCATTGTCGTTGGCC
10	1646	GACATCACGCAAAATCTCAGCGCA	TGCGCTGAGATTTTGCGTGATGTC
	1647	ACGTTCCGTCCACAACCGTATGTT	AACATACGGTTGTGGACGGAACGT
	1648	GCTCATAGGTCTTCCGTAGCCCGT	ACGGGCTACGGAAGACCTATGAGC
	1649	GAAACGAGTCTCTCGCGCCCTAGA	TCTAGGGCGCGAGAGACTCGTTTC
	1650	CGGGACAGAAGCAAGTTACATCGG	CCGATGTAACTTGCTTCTGTCCCG
15	1651	TGACCGCTCGATACCAGGAGGGTG	CACCCTCCTGGTATCGAGCGGTCA
	1652	CTGGCAATAAAGACCTTCCGACCA	TGGTCGGAAGGTCTTTATTGCCAG
	1653	TGCGCGACGTCATGTTGGTGATTA	TAATCACCAACATGACGTCGCGCA
	1654	GTTGGTTGTGGGAACACACCCGCT	AGCGGGTGTGTTCCCACAACCAAC
	1655	TGTGGGTTCGGAAACACAGGAAGT	ACTTCCTGTGTTTCCGAACCCACA
20	1656	GGAAAAACGGCAATTAGCCGAGT	ACTCGGCTAATTGCCGTTTTTTCC
	1657	TGGTGCGGAGTGCCCTCTATTGGG	CCCAATAGAGGGCACTCCGCACCA
	1658	AACCAACAGGCTGCAGCCCAGACT	AGTCTGGGCTGCAGCCTGTTGGTT
	1659	AAACAGATCCATCTGCACGCCAGG	CCTGGCGTGCAGATGGATCTGTTT
	1660	GGAATACCGCGGCGATTATGGCTT	AAGCCATAATCGCCGCGGTATTCC
25	1661	TACTGTTCGCGGCAAACCGTCACT	AGTGACGGTTTGCCGCGAACAGTA
	1662	GATCTCTCGTGGAGCACGTTTTCC	GGAAAACGTGCTCCACGAGAGATC
	1663	GGCATAGCAAACCTTGACCTCCAA	TTGGAGGTCAAGGTTTGCTATGCC
	1664	ATCTGGGATTCGCGAGCCAATATC	GATATTGGCTCGCGAATCCCAGAT
	1665	CGATCAGGATATCATTTACGCCCG	CGGGCGTAAATGATATCCTGATCG
30	1666	ACGGTACCGAAACGGTCTCAGCGT	ACGCTGAGACCGTTTCGGTACCGT
	1667	CTCCCATACCTGCGTTCTTACCGA	TCGGTAAGAACGCAGGTATGGGAG
	1668	GCACGAGAACCTAATTGTCGCACA	TGTGCGACAATTAGGTTCTCGTGC
	1669	GCCACACGATCAAGACAGCGCATG	CATGCGCTGTCTTGATCGTGTGGC
	1670	CCCGTTAACTCACGAGCGGTCAAT	ATTGACCGCTCGTGAGTTAACGGG
35	1671	AGAGAAGGTCATTGCCTGTCGGTG	CACCGACAGGCAATGACCTTCTCT
	1672	CGGCCCTCTTAAAGTAGAGCAGG	CCTGCTCTACTTTAAGAGGGCCCG
•	1673	ACATCGCGTCCGAGGGAGTTAGCG	CGCTAACTCCCTCGGACGCGATGT
	1674	AATGCCTAATCGAGCCAGCGGATC	GATCCGCTGGCTCGATTAGGCATT
	1675	CTCGATCTTTTTAAACCGGCGCTT	AAGCGCCGGTTTAAAAAGATCGAG
40	1676	CGTTCCTGGAAGGCAGGGTCTCAC	GTGAGACCCTGCCTTCCAGGAACG
	1677	CCTGTGCTTACTATCGGCGATCCA	TGGATCGCCGATAGTAAGCACAGG

	1678	GTTAGTCGCCCTATTGGCCTGGTT	AACCAGGCCAATAGGGCGACTAAC
	1679	CCGGTGAGATGACTGTAAATGCCA	TGGCATTTACAGTCATCTCACCGG
	1680	CGTGGTTTAAAACATCGCGCTTCG	CGAAGCGCGATGTTTTAAACCACG
	1681	TAAGACGCAGAAGATGGGGTCCAC	GTGGACCCCATCTTCTGCGTCTTA
5	1682	CACCACAGCTTCTTTGTTCGACCC	GGGTCGAACAAAGAAGCTGTGGTG
	1683	TCGGGTCCGTACCACCACTTTTGC	GCAAAAGTGGTGGTACGGACCCGA
	1684	CCAAGCCCCGAGTACCGAAGATTT	AAATCTTCGGTACTCGGGGCTTGG
	1685	TCCGTGATATGGTCGTGGCGCGGT	ACCGCGCCACGACCATATCACGGA
	1686	TGTCTGTGTCATGGCACCTCGCAT	ATGCGAGGTGCCATGACACAGACA
10	1687	AGGACTGCACTGTGCACGTCTGAT	ATCAGACGTGCACAGTGCAGTCCT
	1688	CCATCCTCATGTACAGCGCCGCTG	CAGCGGCGCTGTACATGAGGATGG
	1689	GTACCCGCGCCTTCCTCGACACAG	CTGTGTCGAGGAAGGCGCGGGTAC
	1690	ACGGGTCCTGGTCGACTAAGGCTT	AAGCCTTAGTCGACCAGGACCCGT
	1691	CGTATCGAAGGCGTGTACAACCGG	CCGGTTGTACACGCCTTCGATACG
15	1692	TGCCGCCCTTTATGCAACGCTCA	TGAGCGTTGCATAAAGGGCGGGCA
	1693	AAACTTACGAGACGGCGGCTGCCA	TGGCAGCCGCCGTCTCGTAAGTTT
	1694	AAGTCTGACAAACGGAACGGGTGT	ACACCCGTTCCGTTTGTCAGACTT
	1695	TAAGCGCAGACCAAAGTATGCGGC	GCCGCATACTTTGGTCTGCGCTTA
	1696	GCAGTTTTTCAGATCCTCCGCAAA	TTTGCGGAGGATCTGAAAAACTGC
20	1697	TCGGAAGCATTTACGCGATCTCAG	CTGAGATCGCGTAAATGCTTCCGA
	1698	CACAGAAACGGTTGAACGAACGCC	GGCGTTCGTTCAACCGTTTCTGTG
	1699	GCATGCTCAGATGGTCGTGCTCAC	GTGAGCACGACCATCTGAGCATGC
	1700	AAGGATTCTCGCTTCCGGCATGAT	ATCATGCCGGAAGCGAGAATCCTT
	· 1701	GGTGGGTAGCGCTGGTATGAAAA	TTTTCATACCAGCGCTACCCCACC
25	1702	ATTATTACGGGACCGAACCAACGG	CCGTTGGTTCGGTCCCGTAATAAT
	1703	GCGCGAGTGTCATGATGTTCACGT	ACGTGAACATCATGACACTCGCGC
	1704	GACATTCGTGACTTGGTCGTCCGC	GCGGACGACCAAGTCACGAATGTC
	1705	TCATTAGTGCAGGCACCGATCAAG	CTTGATCGGTGCCTGCACTAATGA
	1706	GAGTTGTGCGGAGTCATCGGAGTC	GACTCCGATGACTCCGCACAACTC
30	1707	GCCTTTACAGATTTGGCGGGCTAT	ATAGCCCGCCAAATCTGTAAAGGC
	1708	ATGGCGTTTGCGAAGTCGATACAG	CTGTATCGACTTCGCAAACGCCAT
	1709	TGCATCGGCCTCAATCAGAGAACT	AGTTCTCTGATTGAGGCCGATGCA
	1710	ACAATCATGGCAATCTGGCAAATG	CATTTGCCAGATTGCCATGATTGT
	1711	GACGTGGAAGAGTGCAGATCAGCA	TGCTGATCTGCACTCTTCCACGTC
35	1712	AGGGCAGGGACGGACAGTAAGTC	GACTTACTGTCCGTCCCCTGCCCT
	1713	GCATAGGGCGAATCTAGTACGGGC	GCCCGTACTAGATTCGCCCTATGC
	1714	TCCGGCGCATCCTCATTAGCAACT	AGTTGCTAATGAGGATGCGCCGGA
	1715	TGGCCGCTTCCACTAATATTGGAC	GTCCAATATTAGTGGAAGCGGCCA
	1716	CCGGCGGACGGCTCTTGTCAATGA	TCATTGACAAGAGCCGTCCGCCGG
40	1717	CGAGCAACCCAAAAGGAAGCAGTA	TACTGCTTCCTTTTGGGTTGCTCG
Ĺ	1718	GCGTATGATTCGGCAATCCGCCAG	CTGGCGGATTGCCGAATCATACGC

	1719	AGTACCGCTACAACGCTGGTTCGC	GCGAACCAGCGTTGTAGCGGTACT
•	1720	GGGCAGGCCAGGTCCACCTGAGAA	TTCTCAGGTGGACCTGCCC
	1721	CCACTTCTGTGACCGAACCGTGCT	AGCACGGTTCGGTCACAGAAGTGG
	1722	CCTGGTACCAGGCAGCAGTTGATT	AATCAACTGCTGCCTGGTACCAGG
5	1723	TTAGGGTACCGTCGAGAGACGCCA	TGGCGTCTCTCGACGGTACCCTAA
	1724	GGTTGCTTGTGCGCGTGAGGTAGT	ACTACCTCACGCGCACAAGCAACC
	1725	TGCTTCGACCGATGAAACTCGAAG	CTTCGAGTTTCATCGGTCGAAGCA
	1726	TGCCACCCATACTATGCCCAGTGG	CCACTGGGCATAGTATGGGTGGCA
	1727	TGTGCGGCAACGCGTGAAGACGTT	AACGTCTTCACGCGTTGCCGCACA
10	1728	TGAGAGAAGCTGGCCTCGGATCAG	CTGATCCGAGGCCAGCTTCTCTCA
	1729	TATTGCGAATTCGAGTACGTGCCC	GGGCACGTACTCGAATTCGCAATA
	1730	CGAGAGGGGTTCCCCAGTGATCGA	TCGATCACTGGGGAACCCCTCTCG
	1731	TGCCTGGGGTGTCGTTCTAATTCT	AGAATTAGAACGACACCCCAGGCA
	1732	GTGCGTCATTGTGGGTCATCCCAA	TTGGGATGACCCACAATGACGCAC
15	1733	AGGGCTCCCAGCATACCAACGTTG	CAACGTTGGTATGCTGGGAGCCCT
	1734	AACTAGCCGCACCTTTGTGCAGAG	CTCTGCACAAAGGTGCGGCTAGTT
	1735	TTAGCCCAGCCCTTCAATGGGAAC	GTTCCCATTGAAGGGCTGGGCTAA
i	1736	CGGCCTCGGTTGTACGGGTAGTCT	AGACTACCCGTACAACCGAGGCCG
	1737	TCTTTGAGGCGCGGACCCGCATAT	ATATGCGGGTCCGCGCCTCAAAGA
20	1738	GATGGTTCGCCCTTGTGTCGCAGC	GCTGCGACACAAGGGCGAACCATC
	1739	GAGATTCAATACAGGCCGCGGGTC	GACCCGCGGCCTGTATTGAATCTC
	1740	AGGGCGAAGGAAGGTTCCGTTTTT	AAAAACGGAACCTTCCTTCGCCCT
	1741	CTCGACCCCTGCCACTACTGGTTC	GAACCAGTAGTGGCAGGGGTCGAG
	1742	TGTTCCGCGGTCTACGCATTACTG	CAGTAATGCGTAGACCGCGGAACA
25	1743	GAGACGACGTCCTACACCCGCTAA	TTAGCGGGTGTAGGACGTCGTCTC
	1744	AGATTGCGACAGCGACACGTGATT	AATCACGTGTCGCTGTCGCAATCT
	1745	GATACCGTTGGGCATTTCTCGGTA	TACCGAGAAATGCCCAACGGTATC
	1746	GATTGGGAGGCATTCAGCGACGGA	TCCGTCGCTGAATGCCTCCCAATC
	1747	AGGAGGAAACGAGGGCGTAGGTTC	GAACCTACGCCCTCGTTTCCTCCT
30	1748	GCCAAACAACGTCTGACGCCTAGC	GCTAGGCGTCAGACGTTGTTTGGC
	1749	TTTAATGCGGAAAGGATGCACGCG	CGCGTGCATCCTTTCCGCATTAAA
	1750	TTATCGGCCGTTAAAATGGGATGG	CCATCCCATTTTAACGGCCGATAA
,	1751	CCTTGGATTCGTTCATCGCTAGCA	TGCTAGCGATGAACGAATCCAAGG
,	1752	AAGTGAACGTGCAGTGGTCTTCGA	TCGAAGACCACTGCACGTTCACTT
35	1753	TCCTTACCCCTCGTTCAAACGCCT	AGGCGTTTGAACGAGGGGTAAGGA
	1754	ATTCCTGAACCATGCATGGCCTGT	ACAGGCCATGCATGGTTCAGGAAT
	1755	AGCGAGACGCTCGATCACGAACTA	TAGTTCGTGATCGAGCGTCTCGCT
	1756	GCTGGTCTGGCTCGCTGTTTAGAA	TTCTAAACAGCGAGCCAGACCAGC
ļ	1757	CGTGCGCGCATAAAGATAGGTCT	AGACCTATCTTTATGCCGCGCACG
40	1758	TCTGGCACTCACATCGGACAGTCT	AGACTGTCCGATGTGAGTGCCAGA
l	1759	ACCATTGGAGGACCACAGAGCTCC	GGAGCTCTGTGGTCCTCCAATGGT

	1760	TCCAGGGTCGGAGTACATGGCGGG	CCCGCCATGTACTCCGACCCTGGA
	1761	ATATGCCGTCGGATCGTACACGCA	TGCGTGTACGATCCGACGGCATAT
	1762	TGCTGGCGTCAACACTTCCCGATT	AATCGGGAAGTGTTGACGCCAGCA
	1763	CAGGGCGGTGCGGTGAACTAGCCA	TGGCTAGTTCACCGCACCGCCCTG
5	1764	CATGGACTGCCGTACATCAGCTGG	CCAGCTGATGTACGGCAGTCCATG
	1765	CCGGCCATACGCTGGCAAGATTAC	GTAATCTTGCCAGCGTATGGCCGG
	1766	AGCGGACACCTGTACTCTCCCA	TGGAGGAGAGTACAGGTGTCCGCT
	1767	GGAGCCACACCAGTCGAAGATGGT	ACCATCTTCGACTGGTGTGGCTCC
	1768	CGCCACCGGAAATTGAAAAGACTG	CAGTCTTTTCAATTTCCGGTGGCG
10	1769	TGAAACGGATGTTGCTTCTTGACG	CGTCAAGAAGCAACATCCGTTTCA
•	1770	TTGAAGCGGTGAAGAGCCTGTCCT	AGGACAGGCTCTTCACCGCTTCAA
	1771	CGAACCAAGCTGCATTGTCAGTGG	CCACTGACAATGCAGCTTGGTTCG
	1772	GAGTCTGCGCTTGCAATCTTTGCG	CGCAAAGATTGCAAGCGCAGACTC
	1773	GCTGGGTATAGTTGCCTGGCAATG	CATTGCCAGGCAACTATACCCAGC
15	1774	GCAGGCGTTCCATATTCGCAACCC	GGGTTGCGAATATGGAACGCCTGC
	1775	GCGCCAACTAATACCTCCACCGCG	CGCGGTGGAGGTATTAGTTGGCGC
	1776	TGGCGTTCAGTGCAACGCTGGTTA	TAACCAGCGTTGCACTGAACGCCA
	1777	CAAAACTGACGGGTATGGGAGCGC	GCGCTCCCATACCCGTCAGTTTTG
	1778	AGGTGTCGCTGGAACCCGACTTGT	ACAAGTCGGGTTCCAGCGACACCT
20	1779	CTTCCAAAAGCGCAATTGGCTTTG	CAAAGCCAATTGCGCTTTTGGAAG
	1780	TCGGGCTTCTCGCAATTCTGTCAG	CTGACAGAATTGCGAGAAGCCCGA
	1781	GCCAAAAGAATGCGCTGGGTAGGT	ACCTACCCAGCGCATTCTTTTGGC
	1782	TGGTGCCCGCACCGAGAGACTGTA	TACAGTCTCTCGGTGCGGGCACCA
	1783	CGAGGCCGTAGTGGGGACTGCTCT	AGAGCAGTCCCCACTACGGCCTCG
25	1784	CGATCTGCGCATAGAGGGGACTTT	AAAGTCCCCTCTATGCGCAGATCG
	1785	TGTGCAATCGGCCTTCTCAGAGCC	GGCTCTGAGAAGGCCGATTGCACA
	1786	GATCACCTGGACCGCTACCGTTTT	AAAACGGTAGCGGTCCAGGTGATC
	1787	ATGGGGAGTTAAGGACCCTGCACC	GGTGCAGGGTCCTTAACTCCCCAT
	1788	CATTGTGGACAGCCAATGGTGGCT	AGCCACCATTGGCTGTCCACAATG
30	1789	CCATCACCATGCCACGGTAAGATC	GATCTTACCGTGGCATGGTGATGG
	1790	GCACCCGTGTCGTTGGTTAGCAAG	CTTGCTAACCAACGACACGGGTGC
	1791	GGAGTGGGTTCCGCGAATTCACTG	CAGTGAATTCGCGGAACCCACTCC
	1792	GGGGATTTCCTTTCGCAGGCTCGA	TCGAGCCTGCGAAAGGAAATCCCC
	1793	CATTGATCATGTGCACTTGCACCA	TGGTGCAAGTGCACATGATCAATG
35	1794	AGCAGCGCTGCGCTTGTTTCGGAT	ATCCGAAACAAGCGCAGCGCTGCT
	1795	CGAGTAACGCGGTTGCTTTGCGAA	TTCGCAAAGCAACCGCGTTACTCG
	1796	TGGCCTGGAACATAGGTGGAACTC	GAGTTCCACCTATGTTCCAGGCCA
	1797	CGCACACCAAGCGTTTATTGAGAA	TTCTCAATAAACGCTTGGTGTGCG
	1798	TCACCTTCACAGTGGGCATACAGC	GCTGTATGCCCACTGTGAAGGTGA
40	1799	CAAATATCCCTGAGCCCTCGAGCT	AGCTCGAGGGCTCAGGGATATTTG
	1800	GGGAGCTGGTGAGCAGATGTAACG	CGTTACATCTGCTCACCAGCTCCC

	1801	AGGATTGCTTTTGCGTTATGCGGA	TCCGCATAACGCAAAAGCAATCCT
	1802	ATCGTTTGGGCGCTACGCAATTGT	ACAATTGCGTAGCGCCCAAACGAT
	1803	CCGATTTGTCCCAAATGCAACGTT	AACGTTGCATTTGGGACAAATCGG
	1804	AAGGGTCAAGCTCATGGAGCGGAA	TTCCGCTCCATGAGCTTGACCCTT
5	1805	TCTGACGTCGTTCAAGGGCTCGCT	AGCGAGCCCTTGAACGACGTCAGA
	1806	CGCACCACTCCGAGGTATTTGTCT	AGACAAATACCTCGGAGTGGTGCG
	1807	AAGGGGTGAAAAAGGAGAAGCCGA	TCGGCTTCTCCTTTTTCACCCCTT
	1808	AAACCACGCAAATGGCGATACCAT	ATGGTATCGCCATTTGCGTGGTTT
	1809	CAGAAGGGATGACGCCTTAAGTCG	CGACTTAAGGCGTCATCCCTTCTG
10	1810	CATGACGAGAGCGGACCTGAAGTG	CACTTCAGGTCCGCTCTCGTCATG
	1811	CTGGACATGTTTGTTTCGCCACTG	CAGTGGCGAAACAACATGTCCAG
	1812	AAGACCGACTCTCGTCGTTTGCAC	GTGCAAACGACGAGAGTCGGTCTT
	1813	GCGCGATTACATACCGTTTCCGTA	TACGGAAACGGTATGTAATCGCGC
	1814	CACTGACCGGACCCAACCTAACAT	ATGTTAGGTTGGGTCCGGTCAGTG
15	1815	AGTGCAAGTCTAGACACGCCCGAG	CTCGGGCGTGTCTAGACTTGCACT
	1816	GGTTGGTGCGAGATCCTGGACTGT	ACAGTCCAGGATCTCGCACCAACC
	1817	GGTCGTCCCGAAACGTAAACGAGG	CCTCGTTTACGTTTCGGGACGACC
	1818	GACTAGTACGATCACGGGGCGGGT	ACCCGCCCGTGATCGTACTAGTC
	1819	CCGACCTGACCCTGTGTACAGGTT	AACCTGTACACAGGGTCAGGTCGG
20	1820	TGCTCACTGCCCACACTGTTATGG	CCATAACAGTGTGGGCAGTGAGCA
	1821	CGAGGAAACACATTTCTTCGGGCC	GGCCCGAAGAAATGTGTTTCCTCG
•	1822	TGGCACCGGGTGGATTCTTGTCTA	TAGACAAGAATCCACCCGGTGCCA
	1823	GAGGCACGGTGATAGTGGTTGTGC	GCACAACCACTATCACCGTGCCTC
	1824	ATGCAGATGGATCTTTTTCGACGC	GCGTCGAAAAAGATCCATCTGCAT
25	1825	TGCGATAGCCAAAGAGTCGAGGAC	GTCCTCGACTCTTTGGCTATCGCA
	1826	ATGGCGTGTCAGCGAACTGCCTGG	CCAGGCAGTTCGCTGACACGCCAT
	1827	CAATGCAGCTCGGAAGTCAGGTCG	CGACCTGACTTCCGAGCTGCATTG
	1828	AGGATCAGTGCACATGTCCCCTCA	TGAGGGGACATGTGCACTGATCCT
	1829	CACATCTTGGCTGTCACCCGAGAA	TTCTCGGGTGACAGCCAAGATGTG
30	1830	CGCATTATCACCTCAATGCCAGTG	CACTGGCATTGAGGTGATAATGCG
	1831	ACATCCGCAGACTCCCTATAGCCC	GGGCTATAGGGAGTCTGCGGATGT
	1832	GTGAACCCGAACGAGGGGAGTCTC	GAGACTCCCCTCGTTCGGGTTCAC
	1833	GCGTAGGGAATTTGCCTCACGACT	AGTCGTGAGGCAAATTCCCTACGC
	1834	TTTACGCGTCGCTCGGTTGTAGTG	CACTACAACCGAGCGACGCGTAAA
35	1835	GAGAGGCGTCTAGGCGGTTCTAGC	GCTAGAACCGCCTAGACGCCTCTC
	1836	GCATGCTGATAACGAATGCTTCCC	GGGAAGCATTCGTTATCAGCATGC
	1837	CTGAAGCTCGTGTGCGATGAGGGA	TCCCTCATCGCACACGAGCTTCAG
	1838	ACAACGCATGAGGAGGCTTTTTC	GAAAAAGCCTCCTCATGCCGTTGT
	1839	TTTGGAGACGCCAGTACGCGTGGT	ACCACGCGTACTGGCGTCTCCAAA
40	1840	GCTATCATTTGGTGTAAGCCCGCC	GGCGGGCTTACACCAAATGATAGC
	1841	TCAACATCCAGGGCGGTGCTTGGT	ACCAAGCACCGCCCTGGATGTTGA

1842 TTCGATGTAATCCCCAAAGATGCC GGCATCTTTGGGGATTACATCGAA 1843 GGACCTTCGGCAGGTTATCGCCGT ACGGCGATAACCTGCCGAAGGTCC 1844 ACTAAGAAGAGGCAGGCCCCACCT AGGTGGGCCTGCCTCTTCTTACT 1845 AACGGCTCCCCGTCGTACTGCTTA TAGCAGTACGACGGGGACCCGTT 1846 CCTATACCGTCGTGGTTCACGGTT AACGTGGAACCACGACGGTATAGG 1847 CCGCGCAGGCGCTAATACTCAAGG CCTTGAGTATTAGCGCCTGCCGCG 1848 AAATGGGCCAGTGAAATCCTTGGT ACCAAGGATTTCACTGGCCCATT 1849 ACGGTTTCGAAATCCTTGGT ACCAAGGATTTCACTGGCCCATT 1849 ACGGTTTCGAAATCCTTGGT ACCAAGGATTTCACTGGCCACTT 1850 CCGCTTGAGGTTCAGGTCAAGGC CTGCCCAGCAGTATTCCGAAACCGT 1851 ATCGTGCCCGAAGAACACTTAAACG CGTTTAAGTGTCTTCAGGCCACGAT 1852 ACCTGAACCAGGGCGATTGCTTTA 1853 ACCCTATACGCTGGGCATTGCTTTA 1854 TGTTCCCCGAACAACACTTAAACG CGTTTAAGTGTCTTCGGGCACCAT 1855 ACCTTAACGCTGGGCTTAGCCGG 1854 TGTTTCCCCGACCAAGCCTTTGC CCCACGCGTATAGGGT 1855 CAAGTTGCGGGCTAACCCGTATTA TAATACGGGTGAGCCCACCTTC 1856 TGGCTACACCGCTTAGGAGGAACC GGTTCCTCATAGCGGAACACA 1855 CAAGTTGCGGGTCACCCGTATTA TAATACGGGTGAGCCCAACTTC 1856 TGGCTACACCGCTTAGGAGGAACC GGTTCCTCAAGCGGTGACCCA 1857 CCCACAGTTGCGTGACTTACATCGC GCGATGTAAGCACACACTGTGC 1858 ACTGCCACTGCGTCTAGAAGACCTTTACATCGC GCGATGTAAGCACACACTGTGG 1858 ACTGCCACTGCGTCTGAAGAGCC GGTTCCTCAAGCGGTGGACC 1859 GCGCCAGCAAATTTCGTGTGGTGT ACACCACACGAAATTTGCTGCGCC 1850 TGCCTCCGTCGAGCCCAATAGCCA TGCTTTCAGACCCACCACTTTGA 1850 GCGCCAGCAAATTTCGTTGTGGTGT ACACCACACGAAATTTGCTGCGCC 1860 TGCCTCCGTCGAGCCCAATAGCCA TGCTATTCGGCTCACCGGGAAC 1860 TGCCTCCGTCGAGCCAATAGCCA TGCTATTCGGCCCAGGGAAC 1860 TGCCTCCGGCGTTTTTCGTCC GGAACGAAAATTCCCTGGGTAAGCCA 1860 TGCCTCCGGCGTTTTTCGTCC GGAACACACAACACACGAAACC 1860 TGCCTCCGGCGTTTTTAATA TATTACAAACCCCGGGGTTTTTCAC 1862 GGTTACCCAGGCAGATAAGCCA TCACCTACCGAACCA 1863 TGGTTACGACCAAGGAATTCCCGGCGTTTTTAATC 1864 GGTTGACCCCAACAGGAACTAACCTACCAACACACACACA				
1844   AGTAAGAAGAGGCACGCCCACCT   AGGTGGGGCCTCTTCTTACT   1845   AACGGCTCCCCGTCGTACTTA   TAAGCAGTACGACGGGAGCCGTT   1846   CCTATACCGTGGTTCACGTT   AACGTGGAACCACGACGGTATAGG   1847   CCGCGCAGGCGCTATACCTCAGGT   ACCGTGGAACCACGACGGTATAGG   1848   AAATGGGCCAGTGAATACTCAGG   CCTTGAGTATTAGCGCCCTGCGCGG   1848   AAATGGGCCAGTGAAATCCTTGGT   ACCAAGGATTTCACTGGCCCATTT   1849   ACGGTTTCGATACTGCTGGGCAG   CTGCCCAGCAGTATTCGAACCGT   1850   CCGCTTGAAGTACTGGTGAGCC   TGCCCAGCAGTATTCGAACCGT   1850   CCGCTTGAACCAGGACACTTAAACG   CGTTCAACTGGCCCAAGACCGT   1851   ATCGTGCCCGAAGACACTTAAACG   CGTTTAACTGCTCGGCCACGAT   1852   ACCTGAACCAGGGCGATTGCTTTC   GCAAAGGCTTCTAGCCCAGCGTATACGGT   1853   ACCTGAACCAGGGCGATTACTTTC   GCAAAGGCTTCTAGTCGCCAACCACTTC   1854   TGTTTCGCGACTAGAGCCTTTGC   GCAAAGGCTTCTAGTCGCCAACCACTTC   1855   GAAGTTGCGCGCTCACCCGTATTA   TAATACGGGTGAGCCGCCAACTTC   1856   TGGCTACACCGCTAAGCAGC   GGTTCCTCTAAGCGGTGAGCCA   1857   CCACAGTTGCGTGAACCAC   GGTTCCTCAAGCGGTGACCCACTTC   1858   ACTGCACACGGTTACATCGG   GCGATGTAAGCGGACCACTTC   1858   ACTGCACCGCTAACTTGG   GCGATGTAAGCGAACTTTGGTGACCACCACTTCATAGCAGCAACTTTCGTGAACACGACAACTTTCGTGAACACGACAACTTTCGTGAACACGACAACTTTCGTGAACACGACAACTTTCGTGAACACGACACACTTTCATCGGC   1859   GCGCCAGCAAATTTCGTGTGGTGT   ACACCACAGAAATTTGCTGGCCC   1860   TGCCTCCCTGGAGCCGAAACCAC   TGCTTTCAGACGACAGGAACC   1861   GTACAAACGGCGCGATTTTCGTCC   GGACGAAATAGCGCCCGTTTGTAC   1862   GCTTCCCTGGCTCGAACGAAACACCACCACCAACTTTCAGTCCCAACCACCAACCA		1842	TTCGATGTAATCCCCAAAGATGCC	GGCATCTTTGGGGATTACATCGAA
1845   AACGGCTCCCCGTCGTACTGCTTA		1843	GGACCTTCGGCAGGTTATCGCCGT	ACGGCGATAACCTGCCGAAGGTCC
1846 CCTATACCGTCGTGGTTCCACGTT 1847 CCGCGCAGGCGCTAATACTCAAGG 1848 AAATGGGCCAGTGAAATCCTTGGT 1849 ACGGTTCGAATACTCAGGG 1849 ACGGTTCGAATACTCAGGGCCAGTTCAAACCGT 1850 CCGCTTGAGGTTCAAGGCCAGTT 1851 ATCGTGCCCGAAGACACTTAAACG 1851 ATCGTGCCCGAAGACACTTAAACG 1852 ACCTGAACCAGGGCGATTGCTTAA 1853 ACCCTATACGCTGGGCCAGC 1854 TGTTTCGCGACCAGGTTCAAGCGG 1855 GAAGTTGCAGAGCCTTTTGC 1856 TGGCTACACCGGGCTAACCGGG 1857 CCACAGTTCAACGCTTTTGC 1858 ACCCTATACGCTGGGCTAACCGGG 1856 TGGCTACACCGGTTAAACGC 1857 CCACAGTTGCGCAAACCATTAAACG 1858 ACTGCCACCGCTTAGAGACCTTTTGC 1858 ACTGCCACCGCTTAGAGAGCCTTTTCC 1859 GCGCCACCGCTTAGAGAGCCTTTCAAGCGT 1859 GCGCCACCAGTTACATCGC 1859 GCGCCAGCAAATTTCGTGGTGAAGAGCATTCAAGCGT 1859 GCGCCAGCAAATTTCGTGTGGTGTAAAGAGTTTCAGAGCCAACTGTGG 1859 GCGCCAGCAAATTTCGTGTGGTGTAAAGAGTGG 1850 TGCCTCCCTCGAGCCGGAATAGCCA 1861 GTACAAACGGGCGCTATTTCGTC GGACGAAATTTGCTGGCGCC 1860 TGCCTCCCTCGAGCCGAATATCCTC 1862 GCTTCCCTGGAGCAGAACAC GTTTCCGCTCGAGGGAGGCA 1863 CGGCCAGCAAATTTCGTGTGTGT 1864 GGTTGGACCAGAGAAACAC GTTTCCGTTCAGAGCCAGGGAAGC 1865 GGGAAACCACCGGAATAAGCCA TGGCTTTACAGAGCCAGGGAAGC 1866 GGTGGCCCCGGAATAGCCA TGGCTTTCAGAGCCCCGTTTGTAC 1868 GGGGAATACCCGGCGTTTGTAATA TATTACAACGCCCCGGTTTGACC 1866 TGGTTCGTGGAGGAAATTCCC GGAAATTCCTCGGGTCCAACC 1867 GGGGAATACCCGGCCTTTGTAATA TATTACAACGCCGGGGTAACCCAACCAACCAACCAACCAA		1844	AGTAAGAAGAGGCAGGCCCCACCT	AGGTGGGCCTGCCTCTTCTTACT
1847 CCGCGCAGGCGCTAATACTCAAGG CCTTGAGTATTAGCGCCTGCGCGG 1848 AAATGGGCCAGTGAAATCCTTGGT ACCAAGGATTTCACTGGCCCATTT 1849 ACGGTTTCGAATACTGCTGGGCAG CTGCCCAGCAGTATTCGAAACCGT 1850 CCGCTTGAGGTTCAGGTCAGGCT AGCTCTGACCTCAACCGCAGCGGT 1851 ATCGTGCCCGAAGAACACTTAAACG CGTTTAGTGTCTTCGGGCACGAT 1852 ACCTGAACCAGGGCGATTGCTTTA TAAAGCAATCGCCTGGACCTAAGGGG 1853 ACCCTATACGCTGGGCTAAGCGGG CCCGCTTAGCCCAGCGTATAGGGT 1854 TGTTTCGCGACTAGAAGCCTTTCC 1855 GAAGTTGGCGGCTCACCCGTATTA TAAAGCAATCGCCCAGCGTATAGGGT 1856 TGGCTACACCGCTTAGGAGGGACC GGTTCCTCTAAGCGGTGAACCA 1857 CCACAGTTGCAGCAGCAGCACC GGTTCCTCTAAGCGGTGAACCA 1858 TGGCTACACCGCTTAGGAAGGAACC GGTTCCTCTAAGCGGTGAACCA 1859 GCGCCAGCAAATTTCGTTGCAGAGGAACC 1859 GCGCCAGCAAATTTCGTGTGGTT ACACCCACACGAAATTTGCTGGCGC 1859 GCGCCAGCAAATTTCGTGTGTT ACACCACACACAAATTTGCTGGCGC 1860 TGCCTCCGTCGAGCGCGAATAGCCA TGGCTATTCAGCGCAGGAGGCAC 1861 GTACAAACGGGCGCTATTTCGTCC GGACGAAATAGCGCCCGTTTTTAC 1862 GCTTCCCTGGCTCTGAACGAGTAA 1863 CGGCTACCCAGCACAATAGCCA TCGCCTTTCAGACGGAGGCA 1864 GGTTGGACCCAGCAAATTCCTGC GGACGAAATAGCGCCCGTTTGTAC 1865 GGGGAAACCCGGCAAATTCCC GGAACTAACCCTCCAGCGGAAGC 1866 TGGTTGGACCCGACAGGAAATTCC 1866 GGGGAAACCCGGCAATTTCCC 1866 GGGGAATACCCCGGCAATTTCC 1866 TGGTTCGGTCGAGGGAATTTCC 1866 TGGTTCGGTCGAGGGAATTTCC 1867 TCGGTAGGGTTAGTTCC 1868 TGGTTCGGTCGAGGGAATTTCC 1868 TGGTTCGGTCAGCGAAATTCCCTTGCGGTCCAGC 1867 TCGGTAGGGTTCAGTCGTTCAACC 1868 TGGTTCGGTCCAGCGAAATTCCCTTCTCGGTCCACCGAACCA 1867 TCGGTAGGGTTCAGTCCTCTAACCGCACCTCCCGAA 1868 TCGTCCTGGCCGAAGGTTATTCC 1867 TCGGTAGGGTTCAGTCCCTGAGGA 1868 TCGTCCTGGCCGAACCCCCGCAC 1867 TCGGTAGGGTTCAGTCCCTCAGCGAACTTCCAGTACCC 1867 TCGGTAGGGTTCAGTCCCTCAGGAACTTCCAGTACCC 1867 TCGGTAGGGTTCAGTCCCCGGCCCCTCCTCCGAACCACCCGAACCTCCCGAACCTCCCGAACCTCCGAACCACCCGCACCTCCGAACCACCCAC		1845	AACGGCTCCCCGTCGTACTGCTTA	TAAGCAGTACGACGGGGAGCCGTT
1848 AAATGGGCCAGTGAAATCCTTGGT ACCAAGGATTTCACTGGCCCATTT  1849 ACGGTTTCGAATACTGCTGGGCAG CTGCCCAGCAGTATTCGAAACCGT  1850 CCGCTCAAGGTCAAGGCC AGCTCTGACCTCAAGCGG  1851 ATCGTGCCCGAAGACACTTAAACG CGTTTAATGTGTCTTCGGGCACGAT  1852 ACCTGAACCAGGGCGATTGCTTTA TAAAGCAATCGCCTGGTTCAGGT  1853 ACCCTATACGCTGGGCTAAGCGGG CCCGCTTAGCCCAGCGTTAAGGGT  1854 TGTTTCGCGACTAGAGCCTTTCC GCAAAGGCTTCTAGTCCCAGCGTATAGGGT  1855 GAAGTTGGCGGCTCACCCGTATTA TAATACGGGTGAGCCGCAACTTC  1856 GAAGTTGGCGGCTCACCCGTATTA TAATACGGGTGAGCCGCCAACTTC  1857 CCACAGTTGCGTGACTTACATCGC GCGATGAAGTCACCCAACCTTC  1859 GCGCCACGCATTACATCGC GCGATGTAAGTCACCCAACCTTGC  1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTAAGCGAAGTTTGCTGGCGAACCA  1861 GTACAAACGGGCGCTATTCGTCC GACCGAAATTTGCTGGCGC  1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTTTCAGACGCAGTTGTACC  1862 GCTTCCCTGGACCGAAATTTCGTC GACCGAAATTTGCTGGCGC  1863 GTACAAACGGGCGCTATTTCGTC GACCGAAATTACGCCCCGTTTTTACC  1864 GGTTGGACCCGACAGGAAAC GTTTCCGTTCAGAGCCAGGGAAGCA  1865 GGGGAATACCCGGCGTTTTTCATC GGACGAAATTACGCCCCGTTTTTACC  1865 GGGGAATACCCGGCGTTTTTCATC GGACCGAAATTCCCTGTGGGTCCAACC  1865 GGGGAATACCCGGCGTTTTTCATA TATTACAAACGCCGGGTATCCCCAACCA  1866 TGGTTCGGTGAGGTTAATTTC GGAAATTTCCCTTGTGGTTCCACCCAACCA  1867 TCGGTAGCGTAAGTTTTTCGTT ACCACAACCAACCAACCAACCAACCAACCAACCAACC	5	1846	CCTATACCGTCGTGGTTCCACGTT	AACGTGGAACCACGACGGTATAGG
1849 ACGGTTTCGAATACTGCTGGGCAG 1850 CCGCTTGAGGTTCAGGTCAGAGCT 1851 ATCGTGCCCGAAGACACTTAAACG 1852 ACCTGAACCAGGGGCATTGCTTTA 1853 ACCCTATACGGTCAGAGCGGGCATTTGCTTTA 1853 ACCCTATACGGTGGGCTAAGCGGG 1854 TGTTTCGGGACAGACACTTAAACG 1855 GAAGTTGGCGGCTCACCCGTATTA 1855 TATAGCAATCGGCTGGGCTAGCCAGCATATTAGTGGAACCACTGGGT 1856 TGGCTACACCGGTATTA TAATACGGGTGACCGCCAACTTC 1857 CCACAGTTGCGTGAGAGAACC 1857 CCACAGTTGCGTGAGAGAACC 1858 ACTGCCACTGTAGAGAGACC 1859 GCCCACCATTCAGAGGAACC 1859 GCCCACCATTCAGAGGAACC 1859 GCCCACCAATTTCGTTGAAGAGAGCG 1859 GCCCACCAATTTCGTTGAAGAGAGCG 1859 GCCCACCAATTTCGTTGAAGAGATG 1850 GCCCACCAATTTCGTTGGTGT 1850 GCCCCACCAATTTCGTCC 1850 GCCCACCAATTTCGTCC 1850 GCCCACCAAATTTCGTCC 1850 GCCCACCAAATTTCGTCC 1850 GCCCACCAAATTTCGTCC 1850 GCCCACCAAATTTCGTCC 1850 GCCCACCAAATTCGCCCACCAATTTCGGCTCGACGAGCCA 1850 GCCCACCAAATTCGTCGTCC 1850 GCCCACCAAACCACAAATTCGTCCCCCACCAAATTTGCTGCCCCCACCCA		1847	CCGCGCAGGCGCTAATACTCAAGG	CCTTGAGTATTAGCGCCTGCGCGG
1850 CCGCTTGAGGTTCAGGTCAGAGCT  1851 ATCGTGCCCGAAGACACTTAAACG CGTTTAAGTGTCTTCAGGCACGAT  1852 ACCTGAACCAGGGCGATTGCTTTA  1853 ACCCTATACGCTGGGCTAAGCGG CCCGCTTAGCCCAGCGTTCAGGT  1854 TGTTTCGCGACTAGAAGCCTTTGC  1855 GAAGTTGGCGGCTCACCGGATTA  1856 TGGCTACACCAGCGTATTA  1857 CCACAGTTGCGTGAGAGACC  1857 CCACAGTTGCGTGAGAGACC  1858 ACTGCCACTGCGTTAACATCG  1858 ACTGCCACTGTAGAAGCCCTTTGC  1859 GCGCCAGCAATTTCATACATCGC  1859 GCGCCAGCAATTTCATACATCGC  1860 TGCCTCCGTCTAGAAGATGG  1861 GTACAAACGGCGCTTAGAAGATGG  1862 GCTTCCTGAGAAGCCATTTGCTC  1863 CGGCTACCCAGCCGAATAGCCA  1864 GGTTGCACCGGTTTTTTGTCC  1865 GGGGAATACCCGGCTTTTTTGTTCC  1866 GGGGAATACCCGGCTTTTTTTGTCC  1867 CGGCAGAATTGCTTTTCGTCC  1868 TGGTCACCCAGGCGAATAGCCA  1868 GGGGAATACCCGGCTTTTTTGTTCC  1868 TGGTTCACCAGGCGAATAGCCA  1869 TCGGTGAGCGAATAGCTA  1860 TGCTCCTGGCTCTGAACGGAAAC  1861 GGTGCACCCAGGCGAATAGCCA  1862 GCTTCCCTGGCTCTGAACGGAAAC  1863 CGGCTACCCAGGCAGATAGCTA  1864 GGTTGACCCGACAGGGAATTTCC  1865 GGGGAATACCCGGCGTTTTTGTATA  1866 TGGTTCAGTGAGGGAACC  1867 TCGGTAAGGTTATGTTCGGT  1868 TGGTTCAGTGAGGTTATGTTCCGT  1868 TGGTTCAGTGAGGTTATGTTCGGT  1869 TCGGAAGGTTAGTTCGTT  1870 TCCGTGAGGTTCAGTCGGAGAATAGCCAGCACCCACCCGAACCACCACCCGAACCACCCGAACCACC		1848	AAATGGGCCAGTGAAATCCTTGGT	ACCAAGGATTTCACTGGCCCATTT
1851 ATCGTGCCCGAAGACACTTAAACG CGTTTAAGTGTCTTCGGCACGAT 1852 ACCTGAACCAGGGCGATTGCTTTA TAAAGCAATCGCCCTGGTTCAGGT 1853 ACCCTATACGCTGGGCTAAGCGGG CCCGCTTAGCCCAGCGTATAGGGT 1854 TGTTTCGCGACTAGAAGCCTTTGC GCAAAGGCTTCTAGTCGCGAAACA 1855 GAAGTTGGCGGCTCACCCGTATTA TAATACGGGTGAGCCGCAACTTC 1856 TGGCTACACCGCTTAGGAGGAACC GGTTCCTCAAGCGGGTGAACCA 1857 CCACAGTTGCGTGACTTACATCGC GCGATGTAAGTCACCGCAACTTG 1858 ACTGCCACTGCGTCTGAAGAGCACC GGTTCCTCAAGCCGAGTGGCAC 1859 GCGCCAGCAATTTCGTGTGGTT ACACCACACGAAATTTGCTGGCG 1850 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATTCAGCCGAACTTTGCG 1850 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATTCGGCTCGACGGAGCA 1861 GTACAAACGGGCGCTATTTCGTC GGACGAAATTTGCTGGCGC 1862 GCTTCCCTGGACCCGAATAGCCA TGGCTATTCAGGCCCAGGAGCA 1863 CGGCTACCCAGGCAGATAACCA TGACTTCAGAGCCAGGAGCA 1864 GGTTGGACCCGACAGGAAAC GTTTCCGTTCAGAGCCAGGAACC 1865 GGGAATACCCGGCAGTTGTAATA TATTACAAACGCCGGGTATCCCC 1866 TGGTTCGGTGAGCGGAATTTCC 1866 TGGTTCGGTGAGCGGATTTTCGGT 1867 TCGGTAGGGTTCAGTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACCACCACCACCACCACCACCACCACCACCACCAC	•	1849	ACGGTTTCGAATACTGCTGGGCAG	CTGCCCAGCAGTATTCGAAACCGT
1852 ACCTGAACCAGGGCGATTGCTTTA TAAAGCAATCGCCCTGGTTCAGGT 1853 ACCCTATACGCTGGGCTAAGCGGG CCCGCTTAGCCCAGCGTATAGGGT 1854 TGTTTCGCGACTAGAAGCCTTTGC GCAAAGGCTTCAGTCGCGAAACA 1855 GAAGTTGGCGGCTCACCCGTATTA TAATACGGGTGAGCCCAACTTC 1856 TGGCTACACCGCTTAGGAAGACAC GGTTCCTCCTAAGCGGTGACCA 1857 CCACAGTTGCGTGAAGAGTGG CCACTCTTCAGACGCAACTTGG 1858 ACTGCCACTGCGTCTGAAGAGTGG CCACTCTTCAGACGCAACTTGGG 1859 GCGCCAGCAAATTCGTGTGGTGT ACACCACACGAAATTTGCTGGCGA 1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATACGCCAGCAGTGGCAGT 1861 GTACAAACGGGCGCTATTTCGTC GGACGAAATTTGGTGGCGC 1862 GCTTCCCTGGAGCCGAATAGCCA TGGCTATACGGCCCGTTTGTAC 1862 GCTTCCCTGGACCGAATAGCCA TGGCTATACGGCCCGTTTGTAC 1863 CGGCTACCCAGGCAGATAAGCTGA TCAGCTTACTGCCTGGGTAGCCG 1864 GGTTGGACCCGACAGGGAAATTCC 1865 GGGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATCCCC 1866 TGGTTCGGTGAGGGAATTTCC GGAAATTCCCTGCGGGTCCAACC 1867 TCGGTAGGGTTCAGTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACCACCACCAACGAACATAACCTCACCGAACCA 1868 TGCTCCGTGGGAGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1869 TCGTACTGGAAGTGATCGCTGAGGA TCCTCAGCGACCATCCCGAA 1869 TCGTACTGGAAGTAGCCGGCCC GGCCCGGCCATCATTCCAGTACCA 1870 TCCCTCGACCGTCAGCGAAGTTA AACTTCCGTGGGTTTATATTCCCT 1871 AGGGAATATAACAACACCGCGGCC GGCCCGGCCATCATTCCAGTACCA 1872 ATGTCCCGGAAACCAGCAAGTTA AACTTCGCTGGGTTTTATATTCCCT 1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGTCTTTCCAGGACACT 1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACCGAAAGGAGGTTTCC 1875 ACGTGCGGAACCACCAACGAACGACCACCACTCCGAA 1870 TCCGTCGACACACCAACGACGCACCCCCCGCCCACACTTCCGCGAACCACTCCGAA 1871 ACCAGCGACTTAGATAGCCGTCCC CGGACGCCTACTTCAAGTCCCTGGT 1872 ATGTCCCGGAAACCAACCAACCACC GTGCCCGGCACATTCCACGAACTA 1873 ACCAGCGACTTAGATAGCCACCAC TGGTTGGTTTATATTTCCCT 1876 ACGCCACTTTCCATAGAACCACCAC GTGCTCTTTCAGGCAAACGAACGTTTCCATTCCA		1850	CCGCTTGAGGTTCAGGTCAGAGCT	AGCTCTGACCTGAACCTCAAGCGG
1853 ACCCTATACGCTGGGCTAAGCGGG CCCGCTTAGCCCAGCGTATAGGGT 1854 TGTTTCGCGACTAGAAGCCTTTGC GCAAAGGCTTCTAGTCGCGAAACA 1855 GAAGTTGGCGGCTCACCCGTATTA TAATACGGGTGAGCCGCCAACTTC 1856 TGGCTACACCGCTTAGGAGGAACC GGTTCCTCCTAAGCGGTGTAGCCA 1857 CCACAGTTGGCTGACTTACATCGC GCGATTAAGTCACGCAACTGTGG 1858 ACTGCCACTGCGTCTGAAGAGTGG CCACTCTTCAGACGCAACTGTGG 1859 GCGCAGCAAATTTCGTGGTGT ACACCACACACAAATTTGCTGGCGC 1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATTCGGCTCGACGGAGGCA 1861 GTACAAACGGGCGCTATTTCGTCC GGACGAAATTTGCTGCCGC 1862 GCTTCCCTGGCCGAAACGCAACCACGAAATTTGCTGCCGC 1863 CGGCTACCCAGGCAGAACC GTTTCCGTTCAAGCGCAGGAAGC 1864 GGTTGGACCCGACAGGAAAC GTTTCCGTTCAGAGCCAGGAAGC 1865 CGGCTACCCAGGCAGTAAGCTGA TCAGCTTACTCGCTCGGGTACCCG 1866 GGGAATACCCGGCGTTTGAATA TATTACAAACGCCGGGTATTCCCC 1866 TGGTTCGGTGAGCGGAATTTCC GGAAATTCCCTGTCGGGTCCAACC 1867 TCGGTAGGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1868 TGGTTCGGTGAGCGGCTTTGTAATA TATTACAAACGCCGGGTATTCCCC 1866 TGGTTCGGTGAGCGGATTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGAGGTTCAGTCGCTGAGGA TCCTCAGCGACTGAACCCTACCGA 1869 TCGTACTGGATGTGCGTGAGGA TCCTCAGCGACTGAACCCTACCGA 1869 TCGTACTGGAATGATGGCCGGCC GGCCCGGCCATCATTCACAGACCA 1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGCA 1871 AGGGAATATAACAACACCCCCGCAC TGACCCGGCCATCATTCACTGAACGA 1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTTCCCT 1873 ACCAGCGACTTAGATAGCCGTCCG CGGCCGGCCATCATTCCAGTACGAC 1874 GGAAAACCTCCTTTTGCGTCAACCA TGGTTGACCCAAAGAGAGTTTTCCCT 1875 ACGTCCGGCAAACCAACCACCCCCCA CTGGTGTTTTCAGGAAAGAGAGTTTTCCC 1876 ACGCCACTTTCCCTAGAACCAACC CGTTGGTTTCAGGGAAAGAGGGTTTTCC 1877 ACGTCCGGGAACCAACACACCACCACCAC TGGTTTCAGGGAAAGGGGTTTTCCC 1876 ACGCCACTTTCCCTAGAACCAACC CGTTGGTTTCAGGGAAACGGCTTTCCCTAGGAAACACACCCCCCT AGGGTGGCACTATTTCAGGCAACGGACTACTTCCCTAGAACCAACC	10	1851	ATCGTGCCCGAAGACACTTAAACG	CGTTTAAGTGTCTTCGGGCACGAT
1854 TGTTTCGCGACTAGAAGCCTTTGC GCAAAGGCTTCTAGTCGCGAAACA 1855 GAAGTTGGCGGCTCACCCGTATTA TAATACGGGTGAGCCGCCAACTTC 1856 TGGCTACACCGCTTAGGAGGAACC GGTTCCTCCTAAGCGGTGTAGCCA 1857 CCACAGTTGCGTGACTTACATCGC GCGATGTAAGTCACGCAACTGTGG 1858 ACTGCCACTGCGTCTGAAGAGTGG CCACTCTTCAGACGCAGTGGCAGT 1859 GCGCCAGCAAATTTCGTGTGGTGT ACACCACACGCAAATTTGCTGGCGC 1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATTCGGCTCCGACGGAGCCA 1861 GTACAAACGGGCGCTATTTCGTCC GGACGAAAATAGCGCCCGGTTGTACC 1862 GCTTCCCTGGACCGAATAGCCA TGGCTAATAGCGCCGGTTGTACCC 1863 CGGCTACCCAGGCAGAAAC GTTCCGTCAGAGCCAGGAACC 1864 GGTTGGACCGGACAGGAAAC TCAGCTTATCTGCCTGGGTAGCCG 1865 GGGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATCCCC 1866 TGGTTCGGTGAGCGGAACTTTCC GGAACATTACCTCTGCGGTCCAACC 1867 TCGGTAGGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACCACCACCACCACCACCACCACCACCACCACCAC		1852	ACCTGAACCAGGGCGATTGCTTTA	TAAAGCAATCGCCCTGGTTCAGGT
1855 GAAGTTGGCGGCTCACCCGTATTA TAATACGGGTGAGCCGCCAACTTC 1856 TGGCTACACCGCTTAGGAGGAACC GGTTCCTCTAAGCGGTGTAGCCA 1857 CCACAGTTGCGTGAGAGTGG CCACTCTTCAGACGCAACTGTGG 1858 ACTGCCACTGCGTCTGAAGAGTGG CCACTCTTCAGACGCAACTGTGG 1859 GCGCCAGCAAATTTCGTGTGGTGT ACACCACACGAAATTTGCTGGCGC 1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATTCGGCTCGACGGAGGCA 1861 GTACAAACGGGCGCTATTTCGTC GGACGAAATAGCCCCCGTTTGTAC 1862 GCTTCCCTGGCTCTGAACGGAACC GTTTCCGTCAGGGCAGGCA 1863 CGGCTACCCAGGCAGAACC GTTTCCGTTCAGAGCCAGGAACC 1864 GGTTGGACCCGACAGACACAC GTTTCCGTTCAGAGCCAGGAACC 1865 GGGGAATACCCGACAGGAATTTCC 1865 GGGGAATACCCGGCATTTTTAATA TATTACAAACGCCGGGTATTCCCC 1866 TGGTTCGGTGAGGGTTATTTCGTT 1867 TCGGTAGGGTTCAGTCGCTGAGA 1868 TTCGGAGGTTCAGTCGCTGAGA 1868 TCGGAACATAACCTCACCGA 1869 TCGTACTGGATGGCCGGGCC GGCCCGCCATCATTCCAGCAACA 1869 TCGTACTGGATGGCCGGGCC GGCCCGGCCATCATTCCAGCAACA 1870 TCCGTCGACCGTCAGCGAAGTTT AAACTTCGCTGGACGGACAGA 1871 AGGGAATATACACACCGCGCAC GTGCGCGCCATCATTCCAGTACGA 1872 ATGTCCCGGAACACATCACCTC TGAGGTAGCTGTATCCCT 1873 ACCAGCAGCTTCAACCAC GGCCACACTCCGAA 1874 GGAAAACCTCCTTAGATACCCTCACCGGACCATCATTCCAGTACTCCT 1875 ACCAGCCGACACTCCTCA TGAGGTAGCTGGTTTCCCGTGACACT 1876 ACCAGCCGACTTGCTCACCCA TGGTTGACGCAAAGGAGGTTTTCC 1876 ACGGCCACTTTGCCTCAACCA TGGTTGACGCAAAGGAGGTTTTCC 1876 ACGTCCGTCAACCAACACC CGGCCACTTTTGAGTACGCCTTCCGTAGTTCCCTTCCGTAACTCCGTTTTCCGTTAAGTCCGCTGGTTTTCCCTTCCGTAACCCAAGAGGACTTTCCCTTCCGTTAACTCCCTTCCGTTAATTCCCTTCCGTTAATCCCTTCCGTTAATCCCTTCCGTTAATTCCCTTCCGTTAATCCCTTCCGTTTTCCGTTAATCCCTTCCGTTTTCAGGGAAAGTGGCCTTTCCTTCC		1853	ACCCTATACGCTGGGCTAAGCGGG	CCCGCTTAGCCCAGCGTATAGGGT
1856 TGGCTACACCGCTTAGGAGGAACC GGTTCCTCTAAGCGGTGTAGCCA 1857 CCACAGTTGCGTGACTTACATCGC GCGATGTAAGTCACGCAACTGTGG 1858 ACTGCCACTGCGTCTGAAGAGTGG CCACTCTTCAGACGCAACTGTGG 1859 GCGCCAGCAAATTTCGTGTGGTT ACACCACACGAAATTTGCTGGCGC 1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATTCGGCTCGACGGAGGCA 20 1861 GTACAAACGGGCGCTATTTCGTCC GGACGAAATAGCCCCGTTTGTAC 1862 GCTTCCCTGGCTCTGAACGGAAAC GTTTCCGTTCAGAGCCAGGGAAGC 1863 CGGCTACCCAGGCAGAAAC GTTTCCGTTCAGAGCCAGGGAAGC 1864 GGTTGGACCCGACAGGGAAAT TCAGCTTATCTGTCCTGGGTAGCCG 1865 GGGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATTCCCC 1866 TGGTTCGGTGAGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTCAGTCGTGAGGA TCCTCAGCGACCTACCGA 1868 TTCGGAAGGTTCAGTCGCTGAGGA TCCTCAGCGACCACCTCCGAA 1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGCCATCATTCCAGTACGA 1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGCCATCATTCCAGTACGA 1870 TCCGTCCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGTACGCA 1871 AGGGAATATACAACACCCGCGCAC GTGCGCGGTGTTTTTCCCT 1872 ATGTCCCGGAAACCAGCTACCTCA 1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGTTTTTTTTCCGT 1874 GGAAAACCTCCTTTTGCGTCAACCA 1875 ACGTGCGTGCATACCAACCACCGCGCAC 1876 ACGCCACTTTCCCTAGAACCAAC 1877 CGAAGTACCCAACAACCACCTCA TGAGGTAGCTGGTTTCCGGGACGT 1878 GATCCCGGCGAATCACTAAT ATTGATAGGTGAAAGGAACCTTCC 1878 GATCCCGGCGGATCACCAACCACCTCAACCGCTCCAACCGCTCCGTACTTCCAGTACCGAACCACTTCCAGAACCACCCCTCCGCAACCACTTCCAGAACCACCCCTCCGCAACCACTTCCAGAACCACCCTTCCAGAACCAACC		1854	TGTTTCGCGACTAGAAGCCTTTGC	GCAAAGGCTTCTAGTCGCGAAACA
1857 CCACAGTTGCGTGACTTACATCGC GCGATGTAAGTCACGCAACTGTGG 1858 ACTGCCACTGCGTCTGAAGAGTGG CCACTCTTCAGACGCAGTGGCAGT 1859 GCGCCAGCAAATTTCGTGTGGTGT ACACCACACGAAATTTGCTGGCGC 1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATTCGGCTCGACGGAGGCA 20 1861 GTACAAACGGGCGCTATTTCGTCC GGACGAAATAGCGCCCGTTTGTAC 1862 GCTTCCCTGGCTCTGAACGGAAAC GTTTCCGTTCAGAGCCAGGGAAGC 1863 CGGCTACCCAGGCAGATAAGCTGA TCAGCTTATCTGCCTGGGTAGCCG 1864 GGTTGGACCCGACAGGGAATTTCC 1865 GGGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATTCCCC 1865 TGGTTCGGTGAGGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACCATCACCGA 1868 TTCGGAGTGCCGGTGCTAGTAC GTACTAGCACCGGCACCTCACCGA 1869 TCGTACTGGATGGCCGGGCC GGCCCATCATTCCAGTACGA 1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGTCCACCGA 1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTGTATATTCCCT 1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCCT 1873 ACCAGCGACTTAGATAGCCGTCCC GGACGGCATTCTCAGGACAT 1874 GGAAAACCTCCTTTTCCGTCAACCA TGGTTGACGAAGGAGTTTTCCC 1875 ACGTGCGTGCATACCCAACGA GTCCTCTTGAGGTATTCCCT 1876 ACGTCCGTGCATCCCAAGAGGAC GTCCTCTTGAGGAAAGTTTCCCT 1877 CGAAGTACCCAAGAGGAC GTCCTCTTTGAGGAAAGTGACCGT 1878 GATCCCGGCGGATCACCAACG CGTTGGTTCTAAGGCACGT 1879 AGAAAGCGACCGTTTCAGGCTAGCC GCTAGCCTGAACCGCGGACT 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAACCGCCGGACCT 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAACCGCCGCTTTCT 1880 CGCTCCCTTTCAGACCAACGA TCTGAGGAACCACCCCCCCCTTTTCTCTTCCGTGAACCGACGCGAAGGAGACTTTCAAACGGACCGCTTTCTCTCCGCGGAACCTTTCTCCTTAGAAACGACCCCCCCC		1855	GAAGTTGGCGGCTCACCCGTATTA	TAATACGGGTGAGCCGCCAACTTC
1858 ACTGCCACTGCGTCTGAAGAGTGG CCACTCTTCAGACGCAGTGGCAGT 1859 GCGCCAGCAAATTTCGTTGGTGT 1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATTCGGCTCGACGGAGGCA 1861 GTACAAACGGGCGCTATTTCGTC GGACGAAATAGCGCCCGTTTGTAC 1862 GCTTCCCTGGCTCTGAACGGAAAC GTTTCCGTTCAGAGCCAGGAAGC 1863 CGGCTACCCAGGCAGATAAGCTGA TCAGCTTATCTGCCTGGGTAGCCG 1864 GGTTGGACCCGACAGGGAATTTCC 1865 GGGGAATACCCGGCAGTTTGTAATA TATTACAAACGCCGGGTACCCAGGCAACCC 1866 TGGTTCGGTGAGGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTCAGTCGGTAGGAA 1868 TTCGGAGGTTCAGTCGCTGAGGA TCCTCAGCGACCACCACCACCACCACCACCACCACCACCACCAC	15	1856	TGGCTACACCGCTTAGGAGGAACC	GGTTCCTCCTAAGCGGTGTAGCCA
1859 GCGCCAGCAAATITCGTGTGGTGT ACACCACACGAAATITGCTGGCGC 1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATTCGGCTCGACGGAGGCA 1861 GTACAAACGGGCGCTATTTCGTCC GGACGAAATAGCGCCCGTTTGTAC 1862 GCTTCCCTGGCTCTGAACGGAAAC GTTTCCGTTCAGAGCCAGGGAAGC 1863 CGGCTACCCAGGCAGATAAGCTGA TCAGCTTATCTGCCTGGGTAGCCG 1864 GGTTGGACCCGACAGGGAATTTCC GGAAATTCCCTGTCGGGTAGCCG 1865 GGGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATTCCCC 1866 TGGTTCGGTGAGGTTAGTTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACCACCA 1868 TTCGGAGTGCCGGTGCTAGTAC GTACTAGCACCGGCACCACCCACCACCACCACCACCACCACCACC		1857	CCACAGTTGCGTGACTTACATCGC	GCGATGTAAGTCACGCAACTGTGG
1860 TGCCTCCGTCGAGCCGAATAGCCA TGGCTATTCGGCTCGACGGAGGCA 1861 GTACAAACGGGCGCTATTTCGTCC GGACGAAATAGCGCCCGTTTGTAC 1862 GCTTCCCTGGCTCTGAACGGAAAC GTTTCCGTTCAGAGCCAGGGAAGC 1863 CGGCTACCCAGGCAGATAAGCTGA TCAGCTTATCTGCCTGGGTAGCCG 1864 GGTTGGACCCGACAGGGAATTTCC GGAAATTCCCTGTCGGGTAGCCG 1865 GGGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATTCCCC 1866 TGGTTCGGTGAGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACTGAACCCTACCGA 1868 TTCGGAGTGCCGGTGCTAGTAC GTACTAGCACCACCACCA 1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGGCCATCATTCCAGTACGA 1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACCGTCACGA 1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTGTATATTCCCT 1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTCCGGGACAT 1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT 1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC 1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTAGCACACGT 1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT 1877 CGAAGTACCCAAGAGGAC GTCCTCTTTGGGTAACTTCGGTACTTCG 1878 GATCCCGGCGGATCACCTACCAT AGGGTGGCACTATTGCGTACTTCG 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAAGGGGACCG 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAAGGGGACCG 1880 CGCTCCCTTTCATAGTCCTCCG CGGAAGGACCTATGAAAGGGACCG 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAAGGGACCG 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT 1880 CGCTCCCTTTCATAGTCCTCCCC CGGAAGGACCTATGAAAGGGACCG 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT 1880 CGCTCCTTTCATAGTCCTCCCC CGGAAGGACTATGAAAGGGACCG 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATAAAGGGAACCCCACCCAC		1858	ACTGCCACTGCGTCTGAAGAGTGG	CCACTCTTCAGACGCAGTGGCAGT
20 1861 GTACAAACGGCGCTATTTCGTCC GGACGAAATAGCGCCCGTTTGTAC 1862 GCTTCCCTGGCTCTGAACGGAAAC GTTTCCGTTCAGAGCCAGGAAGC 1863 CGGCTACCCAGGCAGATAAGCTGA TCAGCTTATCTGCCTGGGTAGCCG 1864 GGTTGGACCCGACAGGGAATTTCC GGAAATTCCCTGTCGGGTCCAACC 1865 GGGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATTCCCC 1866 TGGTTCGGTGAGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTAGTCGGTGAGGA TCCTCAGCGACTGAACCCTACCGA 1868 TTCGGAGGTTCAGTCGCTGAGGA TCCTCAGCGACCTCCGAA 1869 TCGTACTGGAATGATCGCGGGCC GGCCCGGCCATCATTCCAGTACGA 1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGCACACTCCGAA 1871 AGGGAATATAACAACCCGGCCAC GTGCGCGGTGTTGTTATATTCCCT 1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCAGTACGT 1873 ACCAGCGACTTAGATAGCCGTCCG CGGACCGCTATCTAAGTCGCTGGT 1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC 1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT 1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGGACGTTTCCG 1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTTTCAGTACTTCG 1878 GATCCCGGCGATCACCTACTACAT ATTGATAGGTGACTTCG 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCTGAAACGGTCGCTTTCT 1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG 40 1881 GTGGGTGGTCATAACGACAAGGA TCTGCTGTTATAGACGCACCCAC		1859	GCGCCAGCAAATTTCGTGTGGTGT	ACACCACACGAAATTTGCTGGCGC
1862 GCTTCCCTGGCTCTGAACGGAAAC GTTTCCGTTCAGAGCCAGGGAAGC  1863 CGGCTACCCAGGCAGATAAGCTGA TCAGCTTATCTGCCTGGGTAGCCG  1864 GGTTGGACCCGACAGGGAATTTCC GGAAATTCCCTGTCGGGTAGCCG  1865 GGGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATTCCCC  1865 TGGTTCGGTGAGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA  1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACCCACCCACCA  1868 TTCGGAATGTCCGCTGAGGA TCCTCAGCGACCACTCCGAA  1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGGCCATCATTCCAGTACGA  1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGACAGTCCGAA  1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTGTTATATTCCCT  1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT  1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT  1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAGGAGGTTTTCC  1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT  1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACATTTCGGTACTTCG  1878 GATCCCGGCGATCACCTAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACCGTGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCCG CGGAGAGGACTATGAAAGGGAGCG  40 1881 GTGGGTGGTCATAACGACAGAA TCTGCTGTTATGACCACCACCAC		1860	TGCCTCCGTCGAGCCGAATAGCCA	TGGCTATTCGGCTCGACGGAGGCA
1863 CGGCTACCCAGGCAGATAAGCTGA TCAGCTTATCTGCCTGGGTAGCCG 1864 GGTTGGACCCGACAGGGAATTTCC GGAAATTCCCTGTCGGGTCCAACC 1865 GGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATTCCCC 1866 TGGTTCGGTGAGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACCTACCGA 1868 TTCGGAGTGCCGGTGCTAGTAC GTACTAGCACCGGCACACTCCGAA 1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGGCCACACTCCGAA 1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGTCGACGGA 1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTTATATTCCCT 1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT 1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT 1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC 1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT 1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT 1877 CGAAGTACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT 1878 GATCCCGGCGGATCACCAATA ATGATAGGTGATCCGCGGGATC 1879 AGAAAGCGACCGTTCAGGCTAGC 40 1881 GTGGTGGTCATAACGACAGCA TCTGCTTTATGACCACCACCAC	20	1861	GTACAAACGGGCGCTATTTCGTCC	GGACGAAATAGCGCCCGTTTGTAC
1864 GGTTGGACCCGACAGGGAATTTCC GGAAATTCCCTGTCGGGTCCAACC  1865 GGGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATTCCCC  1866 TGGTTCGGTGAGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA  1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACCTACCGA  1868 TTCGGAGTGTGCCGGTGCTAGTAC GTACTAGCACCGGCACACTCCGAA  1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGGCCATCATTCCAGTACGA  1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGTCGACGGA  1871 AGGGAATATAACAACACCGCGCAC GTGCGCGTGTTGTTATATTCCCT  1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT  1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT  1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC  1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTTGGGTATGCACGCACGT  1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTTGCGTACTTCG  1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCCC CGGAGAGGACTATGAAACGGTCGCTTTCT  1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTTATAAAAGGGAGCG		1862	GCTTCCCTGGCTCTGAACGGAAAC	GTTTCCGTTCAGAGCCAGGGAAGC
1865 GGGGAATACCCGGCGTTTGTAATA TATTACAAACGCCGGGTATTCCCC  1866 TGGTTCGGTGAGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA  1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACCTACCGA  1868 TTCGGAGTGTGCCGGTGCTAGTAC GTACTAGCACCGGCACACTCCGAA  1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGGCCATCATTCCAGTACGA  1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACCGGCACGGA  1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTGTTATATTCCCT  1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT  1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT  1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC  1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACCGCACGT  1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTTGCGTACTTCG  1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCCC CGGAGAGGACTATGAAAGGGAGCG  40 1881 GTGGGTGGTCATAACGACAGCA TCTGCTTGTGTTATGACCACCCACC		1863	CGGCTACCCAGGCAGATAAGCTGA	TCAGCTTATCTGCCTGGGTAGCCG
1866 TGGTTCGGTGAGGTTATGTTCGGT ACCGAACATAACCTCACCGAACCA 1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACTGAACCCTACCGA 1868 TTCGGAGTGTGCCGGTGCTAGTAC GTACTAGCACCGGCACACTCCGAA 1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGGCCATCATTCCAGTACGA 1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGTCGACGGA 1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTGTTATATTCCCT 1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT 1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT 1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC 1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT 1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT 1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG 1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT 1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG 40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTTATGACCACCCAC		1864	GGTTGGACCCGACAGGGAATTTCC	GGAAATTCCCTGTCGGGTCCAACC
1867 TCGGTAGGGTTCAGTCGCTGAGGA TCCTCAGCGACTGAACCCTACCGA 1868 TTCGGAGTGTGCCGGTGCTAGTAC GTACTAGCACCGGCACACTCCGAA 1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGGCCATCATTCCAGTACGA 1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGTCGACGGA 1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTGTTATATTCCCT 1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT 1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT 1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC 1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT 1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT 1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG 1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT 1880 CGCTCCCTTTCATAGTCCTCCCG CGGAGAGGACTATGAAAGGGAGCG 40 1881 GTGGGTGGTCATAACGACAGCAG TCTGCTGTTATGACCACCCAC		1865	GGGGAATACCCGGCGTTTGTAATA	TATTACAAACGCCGGGTATTCCCC
1868 TTCGGAGTGTGCCGGTGCTAGTAC GTACTAGCACCGGCACACTCCGAA  1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGGCCATCATTCCAGTACGA  1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGTCGACGGA  1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTGTTATATTCCCT  1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT  1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT  1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC  1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT  1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG  1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCCCG CGGAGAGGACTATGAAAGGGAGCG  40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTTATGACCACCCAC	25	1866	TGGTTCGGTGAGGTTATGTTCGGT	ACCGAACATAACCTCACCGAACCA
1869 TCGTACTGGAATGATGGCCGGGCC GGCCCGGCCATCATTCCAGTACGA  1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGTCGACGGA  1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTGTTATATTCCCT  1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT  1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT  1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC  1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT  1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG  1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCCCG CGGAGAGGACTATGAAAGGGAGCG  40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTTATGACCACCCACC		1867	TCGGTAGGGTTCAGTCGCTGAGGA	TCCTCAGCGACTGAACCCTACCGA
1870 TCCGTCGACCGTCCAGCGAAGTTT AAACTTCGCTGGACGGCGACGGA  1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTGTTATATTCCCT  1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT  1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT  1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC  1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT  1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG  1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG  40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC		1868	TTCGGAGTGTGCCGGTGCTAGTAC	GTACTAGCACCGGCACACTCCGAA
1871 AGGGAATATAACAACACCGCGCAC GTGCGCGGTGTTGTTATATTCCCT  1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT  1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT  1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC  1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT  1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG  1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG  40 1881 GTGGGTGGTCATAACGACAGCA TCTGCTGTCGTTATGACCACCCAC		1869	TCGTACTGGAATGATGGCCGGGCC	GGCCGGCCATCATTCCAGTACGA
1872 ATGTCCCGGAAACCAGCTACCTCA TGAGGTAGCTGGTTTCCGGGACAT  1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT  1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC  1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT  1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG  1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG  40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC		1870	TCCGTCGACCGTCCAGCGAAGTTT	AAACTTCGCTGGACGGTCGACGGA
1873 ACCAGCGACTTAGATAGCCGTCCG CGGACGGCTATCTAAGTCGCTGGT 1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC 1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT 1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT 1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG 1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGGATC 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT 1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG 40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC	30	1871	AGGGAATATAACAACACCGCGCAC	GTGCGCGGTGTTGTTATATTCCCT
1874 GGAAAACCTCCTTTGCGTCAACCA TGGTTGACGCAAAGGAGGTTTTCC  1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT  1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG  1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG  40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC		1872	ATGTCCCGGAAACCAGCTACCTCA	TGAGGTAGCTGGTTTCCGGGACAT
1875 ACGTGCGTGCATACCCAAGAGGAC GTCCTCTTGGGTATGCACGCACGT  1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG  1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG  40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC		1873	ACCAGCGACTTAGATAGCCGTCCG	CGGACGGCTATCTAAGTCGCTGGT
1876 ACGCCACTTTCCCTAGAACCAACG CGTTGGTTCTAGGGAAAGTGGCGT  1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG  1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC  1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT  1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG  40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC		1874	GGAAAACCTCCTTTGCGTCAACCA	TGGTTGACGCAAAGGAGGTTTTCC
1877 CGAAGTACGCAATAGTGCCACCCT AGGGTGGCACTATTGCGTACTTCG 1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT 1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG 40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC		1875	ACGTGCGTGCATACCCAAGAGGAC	GTCCTCTTGGGTATGCACGCACGT
1878 GATCCCGGCGGATCACCTATCAAT ATTGATAGGTGATCCGCCGGGATC 1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT 1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG 40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC	35	1876	ACGCCACTTTCCCTAGAACCAACG	CGTTGGTTCTAGGGAAAGTGGCGT
1879 AGAAAGCGACCGTTTCAGGCTAGC GCTAGCCTGAAACGGTCGCTTTCT 1880 CGCTCCCTTTCATAGTCCTCTCCG CGGAGAGGACTATGAAAGGGAGCG 40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC		1877	CGAAGTACGCAATAGTGCCACCCT	AGGGTGGCACTATTGCGTACTTCG
1880 CGCTCCCTTTCATAGTCCTCTCG CGGAGAGGACTATGAAAGGGAGCG 40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC		1878	GATCCCGGCGGATCACCTATCAAT	ATTGATAGGTGATCCGCCGGGATC
40 1881 GTGGGTGGTCATAACGACAGCAGA TCTGCTGTCGTTATGACCACCCAC		1879	AGAAAGCGACCGTTTCAGGCTAGC	GCTAGCCTGAAACGGTCGCTTTCT
		1880	CGCTCCCTTTCATAGTCCTCTCCG	CGGAGAGGACTATGAAAGGGAGCG
1882 CTGGAGGCTGCATCGTTCGTAACA TGTTACGAACGATGCAGCCTCCAG	40	1881	GTGGGTGGTCATAACGACAGCAGA	TCTGCTGTCGTTATGACCACCCAC
		1882	CTGGAGGCTGCATCGTTCGTAACA	TGTTACGAACGATGCAGCCTCCAG

	1883	CACCATGAGTTTCGGAGCGAGGAT	ATCCTCGCTCCGAAACTCATGGTG
	1884	CAAGCTGCGTTCGATGAGAGATTG	CAATCTCTCATCGAACGCAGCTTG
	1885	CCTGGGAGCAATGACCGCTCTGGT	ACCAGAGCGGTCATTGCTCCCAGG
	1886	TCCGGCGCTCTACCAAGATGAGAC	GTCTCATCTTGGTAGAGCGCCGGA
5	1887	CGACCGCGTCGCGTATACTATCCG	CGGATAGTATACGCGACGCGGTCG
	1888	AACATTCGCTAGTGGGGTCCAACA	TGTTGGACCCCACTAGCGAATGTT
•	1889	TGTATGATCATCCGACCGAGCAGC	GCTGCTCGGTCGGATGATCATACA
	1890	AGTGCGCCGAGAGGGTGAATAGAC	GTCTATTCACCCTCTCGGCGCACT
	1891	AGGCTTGTTCTGGACCAGCACCAT	ATGGTGCTGGTCCAGAACAAGCCT
10	1892	GGGCCACATAAAGAATTCCGAAC	GTTCGGAATTCTTTATGTGGCCCC
	1893	TGGTGAAGATAAATCCGCATGGCA	TGCCATGCGGATTTATCTTCACCA
	1894	ATTTCCACCACGCTCTTGCCAAAT	ATTTGGCAAGAGCGTGGTGGAAAT
	1895	CGCGTAAAGCTGTCACCGATGACC	GGTCATCGGTGACAGCTTTACGCG
	1896	TCCCCAACCGGTAACAACAGCGAC	GTCGCTGTTGTTACCGGTTGGGGA
15	1897	CCTCTGCTCGCCTTACACCCATGG	CCATGGGTGTAAGGCGAGCAGAGG
	1898	CAAGCTGCTCCTGTGCTGAAGGGC	GCCCTTCAGCACAGGAGCAGCTTG
	1899	AAACGAACGATGGTCGGTAGACCG	CGGTCTACCGACCATCGTTCGTTT
	1900	TCAGTTCGATGGCTATTGCGCCTC	GAGGCGCAATAGCCATCGAACTGA
	1901	GGCTCTCAACGGACGCAAATCATA	TATGATTTGCGTCCGTTGAGAGCC
20	1902	AGTAGAGTGTTGCGGCTGCCGATC	GATCGGCAGCCGCAACACTCTACT
	1903	AGACACTAGACCGCCGTGACCTGA	TCAGGTCACGGCGGTCTAGTGTCT
	1904	ACCGAGCACCGAATTTCCTTGTCC	GGACAAGGAAATTCGGTGCTCGGT
	1905	CCGTGGCCAAGATACGAACGAATT	AATTCGTTCGTATCTTGGCCACGG
	1906	CCTCCTACAGCATCCACATGAGGG	CCCTCATGTGGATGCTGTAGGAGG
25	1907	CACTCGGCAAATACGTATGCGCAT	ATGCGCATACGTATTTGCCGAGTG
	1908	ACCGAGTTGAAGCACGAATTTGGG	CCCAAATTCGTGCTTCAACTCGGT
	1909	GACCACCTCGGAAGATCGTTCTGC	GCAGAACGATCTTCCGAGGTGGTC
	1910	TCAACTGGGCAAACGAAGAGCACA	TGTGCTCTTCGTTTGCCCAGTTGA
	1911	GCTTAGCCTCACACGTGCATACCA	TGGTATGCACGTGTGAGGCTAAGC
30	1912	CTGCGGTCTCCAAGTACCATTTCG	CGAAATGGTACTTGGAGACCGCAG
	1913	GTTCCGTATTACGGCGGCCATAAG	CTTATGGCCGCCGTAATACGGAAC
	1914	ATCGACGCAACCGGATAGTCTCTG	CAGAGACTATCCGGTTGCGTCGAT
	1915	CGCAGATAAACCGGCATCTTTCAG	CTGAAAGATGCCGGTTTATCTGCG
	1916	ACCTGCCAATACGGGTCTACGGTT	AACCGTAGACCCGTATTGGCAGGT
35	1917	ACACCTGTTGCCATGCTGATCCGT	ACGGATCAGCATGGCAACAGGTGT
	1918	AAACTGTCTACTGCGCAATTCCGC	GCGGAATTGCGCAGTAGACAGTTT
	1919	GCAACTAGCCCGTGCTAGGATCGT	ACGATCCTAGCACGGGCTAGTTGC
	1920	TCGTAGTGGTGGATTGTTGTGCGT	ACGCACAACAATCCACCACTACGA
	1921	GGCTTACTCCTCAATTGCGACACG	CGTGTCGCAATTGAGGAGTAAGCC
40	1922	CACGACTCCCTGCCAGATTTGATT	AATCAAATCTGGCAGGGAGTCGTG
	1923	CTTAGACGTCGGCAATGTCACGTC	GACGTGACATTGCCGACGTCTAAG

	1924	CTCAGAGCACAATCTGCCCTGCCT	AGGCAGGCAGATTGTGCTCTGAG
	1925	GCTAGGAAAGTCGGCATTCATGGG	CCCATGAATGCCGACTTTCCTAGC
	1926	AAAGCCCCAAAATTCCGCCTAACC	GGTTAGGCGGAATTTTGGGGCTTT
	1927	GCGCAACGCTAAGGGACTATCAAG	CTTGATAGTCCCTTAGCGTTGCGC
5	1928	CGTCCGCTGGGATGAGTCTCCTGC	GCAGGAGACTCATCCCAGCGGACG
	1929	ACAGGCCTCGTGATTGGTGTGGGT	ACCCACACCAATCACGAGGCCTGT
	1930	CATTCTCCTTCCGGGACCACGCCT	AGGCGTGGTCCCGGAAGGAGAATG
	1931	TCGGAGTTGACCAAGCTCAGTGCG	CGCACTGAGCTTGGTCAACTCCGA
	1932	ACGCGCCACTGCAATTGCAAACAC	GTGTTTGCAATTGCAGTGGCGCGT
10	1933	AGTTCATGGAGCCGGCGTATTGTT	AACAATACGCCGGCTCCATGAACT
	1934	ACGTTTAATGCGGGGCCCGCCTAC	GTAGGCGGGCCCCGCATTAAACGT
	1935	TGAGGCTTTAGCCTACGCGCAGGT	ACCTGCGCGTAGGCTAAAGCCTCA
	1936	CAGCGTTATGAGCGCGGAGTTTAT	ATAAACTCCGCGCTCATAACGCTG
	1937	GTCCACGTGACCACGGATAGTTGG	CCAACTATCCGTGGTCACGTGGAC
15	1938	GATTATGCTCCTACGCCTGCTCCG	CGGAGCAGGCGTAGGAGCATAATC
	1939	TCGTCAAGGGCATGATGTGTGGGA	TCCCACACATCATGCCCTTGACGA
	1940	GATGGACCGCCAAAGACACCTTGA	TCAAGGTGTCTTTGGCGGTCCATC
	1941	TACACGAGGATGGGGTCAAGCTTT	AAAGCTTGACCCCATCCTCGTGTA
	1942	ACACGCACAAAACGTTTGAAAGGC	GCCTTTCAAACGTTTTGTGCGTGT
20	1943	GTTATCGTGGGCCGATGGTACTGA	TCAGTACCATCGGCCCACGATAAC
	1944	ACATGACCGTATCCGCCTGCTTCG	CGAAGCAGGCGGATACGGTCATGT
	1945	GAAGGCGAACCACTGAAACTACGC	GCGTAGTTTCAGTGGTTCGCCTTC
	1946	TGACTTTTGCAACGGGTGGAACCA	TGGTTCCACCCGTTGCAAAAGTCA
	1947	TGAATTCGTAGGTTTTGGGTGCGG	CCGCACCCAAAACCTACGAATTCA
25	1948	AGCATTTATGAAGCGGCCATTGCG	CGCAATGGCCGCTTCATAAATGCT
	1949	TGCTCCTCGCGTTGGTACCGTGAG	CTCACGGTACCAACGCGAGGAGCA
	1950	CGCAGCAAGAAACAGCAACTGTTG	CAACAGTTGCTGTTTCTTGCTGCG
	1951	AGACGCTTGGAGTGAAAACTCGGA	TCCGAGTTTTCACTCCAAGCGTCT
	1952	CATTCGTAGAATGCCCCAAATGGA	TCCATTTGGGGCATTCTACGAATG
30	1953	CCAGAAGGTTCGGGACCCGTCGTG	CACGACGGGTCCCGAACCTTCTGG
	1954	GAGAAGCCGGTTCTCAGAGCACAT	ATGTGCTCTGAGAACCGGCTTCTC
	1955	TTGCGTTGCAAGATATCTGGCCCG	CGGGCCAGATATCTTGCAACGCAA
	1956	GGGTTGCATGTTCAGGCAAGACGA	TCGTCTTGCCTGAACATGCAACCC
	1957	CTCACGAAGGTGACATATCACGCC	GGCGTGATATGTCACCTTCGTGAG
35	1958	GCCCGAGATACGGGTTCAAAAAGA	TCTTTTGAACCCGTATCTCGGGC
	1959	CATCTTCGCGCTTCTTCACTCCGC	GCGGAGTGAAGAAGCGCGAAGATG
	1960	TTACACGGTAAGCGTACGGCCGCC	GGCGGCCGTACGCTTACCGTGTAA
	1961	ACCTTCGGACAATGTGGCGTTCGC	GCGAACGCCACATTGTCCGAAGGT
	1962	TGAATGGTTCTGCTAGGCCCACAC	GTGTGGGCCTAGCAGAACCATTCA
40	1963	CACGCCTGTCTGACATATGGATGC	GCATCCATATGTCAGACAGGCGTG
	1964	CGCCTCAACCCAATCTGAGAACGT	ACGTTCTCAGATTGGGTTGAGGCG

	1965	TTACGCTTACTGCGAGCTGGGTCC	GGACCCAGCTCGCAGTAAGCGTAA
	1966	GGCTTGTGGGGCAATACGCATCTT	AAGATGCGTATTGCCCCACAAGCC
	1967	CACTCTCCTTTGGATGCGGAACAA	TTGTTCCGCATCCAAAGGAGAGTG
	1968	GACCAGCCATCACGTAACGGCCCT	AGGGCCGTTACGTGATGGCTGGTC
5	1969	AGGAACCGGATGTGGTTATGGAGC	GCTCCATAACCACATCCGGTTCCT
	1970	ATCCATGGGCAACTGAGCCTATGC	GCATAGGCTCAGTTGCCCATGGAT
	1971	GGAACAGCACTTGTTACCGCCCAC	GTGGGCGGTAACAAGTGCTGTTCC
	1972	TGGCTCGCTTCAAGCCTGTTTGCT	AGCAAACAGGCTTGAAGCGAGCCA
	1973	CAAACGTGAGGTCATGACCACCAT	ATGGTGGTCATGACCTCACGTTTG
10	1974	ACCGATGTCTTGAAGTCCGGAGGT	ACCTCCGGACTTCAAGACATCGGT
	1975	CGAAAATGCATGATGATCTCCCCT	AGGGGAGATCATCATGCATTTTCG
	1976	TTTGGTATTCTCGCTGCACCGTTG	CAACGGTGCAGCGAGAATACCAAA
	1977	GCGTACTCAACCACATTCCCGACC	GGTCGGGAATGTGGTTGAGTACGC
	1978	AGCAAACAACAGCGGTCCGAGCAT	ATGCTCGGACCGCTGTTGTTTGCT
15	1979	GGACTAGGAGCGGGGATAGCTGAG	CTCAGCTATCCCCGCTCCTAGTCC
	1980	CCTTAACGAAAACCTGTCGACCGC	GCGGTCGACAGGTTTTCGTTAAGG
	1981	CTCGATCGCATAAGCAAGAAACCG	CGGTTTCTTGCTTATGCGATCGAG
	1982	CCCGTTGTTTGGGCGACAAAAGT	ACTITITGTCGCCCAAACAACGGG
	1983	CGGCGGCTCTCGCATGATCTCGTT	AACGAGATCATGCGAGAGCCGCCG
20	1984	CGGATGGAGAGGAGTCTACGTCCC	GGGACGTAGACTCCTCTCCATCCG
	1985	CAGAACAATATCGTGCGTCAACCG	CGGTTGACGCACGATATTGTTCTG
	1986	CCTTTGCGCGCTCCGAGTAAGGTA	TACCTTACTCGGAGCGCGCAAAGG
	1987	GGAAACGGCACCTATCTGTCGTGA	TCACGACAGATAGGTGCCGTTTCC
	1988	CGACCGACAAAACCAAATGCCGCC	GGCGGCATTTGGTTTTGTCGGTCG
25	1989	CCAAGGGTGTGGGAGCTGAAGAGA	TCTCTTCAGCTCCCACACCCTTGG
	1990	TTAAGTGCGCATAGTCCTCGTGGG	CCCACGAGGACTATGCGCACTTAA
	1991	GCCTGGTGGGGTAAGTCATGATGC	GCATCATGACTTACCCCACCAGGC
	1992	GAGCAGCAGATTGATGCGCTTATG	CATAAGCGCATCAATCTGCTGCTC
	1993	TGCGCCAACTTCCGGAATATTTGC	GCAAATATTCCGGAAGTTGGCGCA
30	1994	AACCCCATCATGAAATGCTCTCCG	CGGAGAGCATTTCATGATGGGGTT
	1995	GTCCAACGGTACTGGCGTGATGTT	AACATCACGCCAGTACCGTTGGAC
	1996	ACTCGGCTGATCGTGAGATGGTGA	TCACCATCTCACGATCAGCCGAGT
	1997	ATTCGTGGGCGCATCTCGGAATGT	ACATTCCGAGATGCGCCCACGAAT
	1998	TCCCGTCCTGTAATCCAGGGAACA	TGTTCCCTGGATTACAGGACGGGA
35	1999	CTTCGCTGCACCTACATTGCGCCA	TGGCGCAATGTAGGTGCAGCGAAG
	2000	GCGTGTAGATGACTGTGCTTTGGG	CCCAAAGCACAGTCATCTACACGC
	2001	CTATGGTATCGAGACATCGGCGGA	TCCGCCGATGTCTCGATACCATAG
	2002	CCTCGTACTCCGTCGTATGCACAA	TTGTGCATACGACGGAGTACGAGG
	2003	TGGTGCGTCCGTAGTGCCTGCACT	AGTGCAGGCACTACGGACGCACCA
40	2004	CGCGATCCTAGTTGAAAGCTTTGC	GCAAAGCTTTCAACTAGGATCGCG
	2005	ACGATCCAGGTGTTGGGCACTAAG	CTTAGTGCCCAACACCTGGATCGT

	2006	CCAATCTAGGATACACCACGCCCG	CGGCGTGGTGTATCCTAGATTGG
	2007	GATACGTGGGGTATAGGCGGGCCC	GGGCCGCCTATACCCCACGTATC
	2008	CATGGAACAAACCGTCGTAGGGGA	TCCCCTACGACGGTTTGTTCCATG
	2009	ACACTCGCGCAGTATTCGAGTCGT	ACGACTCGAATACTGCGCGAGTGT
5	2010	CTCAGTCTCGAAGGTGATCCGACC	GGTCGGATCACCTTCGAGACTGAG
	2011	TCCCAATCCCCGTGGTATCGTCGT	ACGACGATACCACGGGGATTGGGA
	2012	AATCAACGTAGTTCCGGTGGTCCG	CGGACCACCGGAACTACGTTGATT
	2013	CTTAACAACCCAGGGGTTTGGGCT	AGCCCAAACCCCTGGGTTGTTAAG
	2014	CTACCGCTGCATGGCGTTAGATTG	CAATCTAACGCCATGCAGCGGTAG
10	2015	TTATTGGTGGCGGACGGAGTGAGT	ACTCACTCCGTCCGCCACCAATAA
	2016	TTAAGGGTGAACTCAACCGCGTGA	TCACGCGGTTGAGTTCACCCTTAA
	2017	TTTGATTGAAACGCTGCGCACTAC	GTAGTGCGCAGCGTTTCAATCAAA
	2018	TCATGTGTAGGTCGCGGCCGTCAC	GTGACGGCCGCGACCTACACATGA
	2019	CTCCGAACCTTCTGGGCCTCTTTT	AAAAGAGGCCCAGAAGGTTCGGAG
15	2020	CTGTTGCCCATTGGCCCGACACTC	GAGTGTCGGGCCAATGGGCAACAG
	2021	CACGATCGCTGAGCAACACATCAC	GTGATGTTGCTCAGCGATCGTG
	2022	CGGATCATAAGCGTCCGCCTTCGT	ACGAAGGCGGACGCTTATGATCCG
	2023	AGGTTAACGCAACATGTGATCCGC	GCGGATCACATGTTGCGTTAACCT
	2024	GGGAAAAACAGCTAAGCCTTGCGA	TCGCAAGGCTTAGCTGTTTTCCC
20	2025	ACTTATTGCCGGGATCCGTACACA	TGTGTACGGATCCCGGCAATAAGT
	2026	TGCGGTCTGGAAAGGAAGGGAGGG	CCCTCCCTTCCTTTCCAGACCGCA
	2027	GCTGCCACCTGGACATCGCATACA	TGTATGCGATGTCCAGGTGGCAGC
	2028	GCAGGCATGACAGTGGCGTAGTAC	GTACTACGCCACTGTCATGCCTGC
	2029	GCGGCCCTGATGGTTTGGCTGAGC	GCTCAGCCAAACCATCAGGGCCGC
25	2030	TCCCCATTTAGTCCCCTCCATCAC	GTGATGGAGGGGACTAAATGGGGA
	2031	GCAACACAAATGCGAGCGTAGGAG	CTCCTACGCTCGCATTTGTGTTGC
	2032	GGCGTTTGTATTCGAGCCACGTAG	CTACGTGGCTCGAATACAAACGCC
	2033	GGTAACGTCGCACGTGGAATTCCG	CGGAATTCCACGTGCGACGTTACC
	2034	ACTTCACAACGCTCCGTTGGACAC	GTGTCCAACGGAGCGTTGTGAAGT
30	2035	CCGAATTATAAAGCGCAAGGCACA	TGTGCCTTGCGCTTTATAATTCGG
	2036	GGACCCGATAAGACTCTGACGCCG	CGGCGTCAGAGTCTTATCGGGTCC
	2037	ACCCGTTTCTCGTAGGAACCTGCT	AGCAGGTTCCTACGAGAAACGGGT
	2038	CACGTTCGACTGTATCTGGTTGCC	GGCAACCAGATACAGTCGAACGTG
	2039	CCTCGGATGGGCCCATGACCTTGA	TCAAGGTCATGGGCCCATCCGAGG
35	2040	GGACGCCTGCTGTAGGGGTTTGAT	ATCAAACCCCTACAGCAGGCGTCC
. ,	2041	CTCGAGCGTGGGCTAAAAGAGCAT	ATGCTCTTTTAGCCCACGCTCGAG
	2042	TTTACTTCTTAGGGCGCGTTTGGG	CCCAAACGCGCCCTAAGAAGTAAA
	2043	ACCACCAACATAGCGCGCACTAGT	ACTAGTGCGCGCTATGTTGGTGGT
	2044	TGGTTACACGGCAGCCCGCGTAAG	CTTACGCGGGCTGCCGTGTAACCA
40	2045	TTATGGTACGTTGCTGCGTGCGGG	CCCGCACGCAGCAACGTACCATAA
	2046	ACCGCGGATCTAACGAATCCCATT	AATGGGATTCGTTAGATCCGCGGT

	2047	CATGATCCCGCCCTTAGGTTAAGC	GCTTAACCTAAGGGCGGGATCATG
	2048	TACCGCTTCAAAGGGTTGCCGAAT	ATTCGGCAACCCTTTGAAGCGGTA
	2049	GCACCGCGTCAATATTACCGAGGA	TCCTCGGTAATATTGACGCGGTGC
	2050	GTGTCGCGGCTTTACAGAAGGAGA	TCTCCTTCTGTAAAGCCGCGACAC
5	2051	GCAAGCCATACCGCAATAAACTCG	CGAGTITATTGCGGTATGGCTTGC
	2052	ATGAGGTCGTGCTGCGTTCACGAG	CTCGTGAACGCAGCACGACCTCAT
	2053	CGAGACTAGTGCCGATGCAGGGTA	TACCCTGCATCGGCACTAGTCTCG
	2054	GCCTCATCATAGACGCTGGATGCA	TGCATCCAGCGTCTATGATGAGGC
	2055	GACAGGCGTCGGTAAGCTCTCAAG	CTTGAGAGCTTACCGACGCCTGTC
10	2056	GCTACGAATCTTCCCTGTCGCCAC	GTGGCGACAGGGAAGATTCGTAGC
	2057	TTTGGCAGAACGTACCAGTGGGGT	ACCCACTGGTACGTTCTGCCAAA
	2058	GGACAATAAGCACCGGAGAATGCG	CGCATTCTCCGGTGCTTATTGTCC
	2059	TCATGAACCTTCTGATGCCGCGAA	TTCGCGGCATCAGAAGGTTCATGA
	2060	CGCCGCATTACCTTAAAAACGTGC	GCACGTTTTTAAGGTAATGCGGCG
15	2061	ACGAGTCCAACCGCCTCATTGATT	AATCAATGAGGCGGTTGGACTCGT
	2062	GCGAAGAGTTGCTACTCTTCCGCC	GGCGGAAGAGTAGCAACTCTTCGC
	2063	CGTCGGCAACAATCTTTTTCGTGA	TCACGAAAAAGATTGTTGCCGACG
	2064	AATCCTGTGCACCCGTGAGACGCG	CGCGTCTCACGGGTGCACAGGATT
	2065	AACCTATATGCATCAACGCGAGCC	GGCTCGCGTTGATGCATATAGGTT
20	2066	GAACTTGGCAAAACAGCCCGGAAA	TTTCCGGGCTGTTTTGCCAAGTTC
	2067	CTCTATGGCCGTTTGCCGTCTGCA	TGCAGACGGCAAACGGCCATAGAG
	2068	AGTGCACCGGGTTGTGGACACAAT	ATTGTGTCCACAACCCGGTGCACT
	2069	CCTGGCTTTTCACACGCCAAGAAA	TTTCTTGGCGTGTGAAAAGCCAGG
	2070	CACTCAGCGTAGCCTGAAGCCTGG	CCAGGCTTCAGGCTACGCTGAGTG
25	2071	GAATTATCGACCGCAGCGGTGTCG	CGACACCGCTGCGGTCGATAATTC
	2072	GTGACATCACATGGTGGCCGAGCG	CGCTCGGCCACCATGTGATGTCAC
	2073	AGCACCTTGCCGAGTCACCAGTGA	TCACTGGTGACTCGGCAAGGTGCT
	2074	TAGGTTGCAGGAATGGTGGGCACC	GGTGCCCACCATTCCTGCAACCTA
	2075	GTCCCATACGTGTGGTACGCGGAT	ATCCGCGTACCACGTATGGGAC
30	2076	TCGGATACTCTCGCGTGCCACGGG	CCCGTGGCACGCGAGAGTATCCGA
	2077	CAACGTTCGCCCCTAAGCCCAAAT	ATTTGGGCTTAGGGGCGAACGTTG
	2078	GTTAGGTCACCGCGGCATATCCTA	TAGGATATGCCGCGGTGACCTAAC
	2079	GTTCACCGGCCTCTACTTGGGTTT	AAACCCAAGTAGAGGCCGGTGAAC
	2080	AATCCGCGTCTAGGTCATGTGGTC	GACCACATGACCTAGACGCGGATT
35	2081	GCTACGCCTCTGGAGGTGGTACCC	GGGTACCACCTCCAGAGGCGTAGC
	2082	CAGGGAATGCTACAAAGGGTCCAA	TTGGACCCTTTGTAGCATTCCCTG
	2083	AAGGGTTAGCTGCCCGGTTAACAG	CTGTTAACCGGGCAGCTAACCCTT
	2084	CCTCGCAAGCGCGATATTTATGCC	GGCATAAATATCGCGCTTGCGAGG
	2085	GCCTCCCGGTCATGGTCAAGGGAA	TTCCCTTGACCATGACCGGGAGGC
40	2086	GCTGTTGAGCGGCGACCTGTGCAC	GTGCACAGGTCGCCGCTCAACAGC
	2087	CGCTGACTTAGCTCTGATGTGCCG	CGGCACATCAGAGCTAAGTCAGCG

	2088	TTCATGGCATTCATCACGAAGGAA	TTCCTTCGTGATGAATGCCATGAA
	2089	TAGTGTTATGCCCGCGTGTGAATG	CATTCACACGCGGGCATAACACTA
	2090	CATGTAAGGGCACGGTCGTGGGCA	TGCCCACGACCGTGCCCTTACATG
	2091	CAGGAAGCTCGCTCCGTGATGCAC	GTGCATCACGGAGCGAGCTTCCTG
5	2092	CCTGCTGATAGCAACCTCACTGCA	TGCAGTGAGGTTGCTATCAGCAGG
	2093	ACTACGAGGGCAGGGTCTAGGCG	CGCCTAGACCCTGCCCCTCGTAGT
	2094	CATAATGTGGGTGCTGACGCCGAT	ATCGGCGTCAGCACCCACATTATG
	2095	TAGCGAATCCACACAGAGCCGCTC	GAGCGGCTCTGTGTGGATTCGCTA
	2096	TCGCGAAATCCCTAAATCCTGTGC	GCACAGGATTTAGGGATTTCGCGA
10	2097	TGGCACGAATCAAGCCACCAACTC	GAGTTGGTGGCTTGATTCGTGCCA
	2098	GCGGACCGTCTTTGCTATCTGACG	CGTCAGATAGCAAAGACGGTCCGC
	2099	AGGCCCGCCTTGTAATTGGTCAT	ATGACCAATTACAAGGCGGGGCCT
	2100	CTGGTCCCATACGCCGCTGACTAG	CTAGTCAGCGGCGTATGGGACCAG
	2101	TGCTAACTGCGGCCCTACAGAGTC	GACTCTGTAGGGCCGCAGTTAGCA
15	2102	TGGTTTTATGTTCGGTAGCGTCCG	CGGACGCTACCGAACATAAAACCA
	2103	AGCTCAAACTTCTCCCACGGGATG	CATCCCGTGGGAGAAGTTTGAGCT
	2104	CGCGAAGATAGTGAAATCCGCATC	GATGCGGATTTCACTATCTTCGCG
	2105	GAGTGAAACCTCTCGCGGGTTGCA	TGCAACCCGCGAGAGGTTTCACTC
	2106	TCGAATGCTCTGCAGTGACGTCAA	TTGACGTCACTGCAGAGCATTCGA
20	2107	AGGTGGCAATGATCGACGACCCTG	CAGGGTCGTCGATCATTGCCACCT
	2108	GTCCGGAGCCGTGCAAAGCAATAA	TTATTGCTTTGCACGGCTCCGGAC
	2109	CTTTTGGGGATTAGAGGCCGACAA	TTGTCGGCCTCTAATCCCCAAAAG
	2110	GGCATAAAGGCTTCCGTTCCTGTC	GACAGGAACGGAAGCCTTTATGCC
	2111	GCGGACCGTAAAGCGGGCAGATAG	CTATCTGCCCGCTTTACGGTCCGC
25	2112	TTTCAAGAGTGCATCGAATCCACG	CGTGGATTCGATGCACTCTTGAAA
	2113	CCGGCATCCCTTCTCGCTGTTGCC	GGCAACAGCGAGAAGGGATGCCGG
	2114	ACACAGAGACGCGAACGGAGTGCA	TGCACTCCGTTCGCGTCTCTGTGT
	2115	AGCGGCATTCTCCCACTCGTTACT	AGTAACGAGTGGGAGAATGCCGCT
	2116	GGAGCGTACTGCGCCTCGCAAGTC	GACTTGCGAGGCGCAGTACGCTCC
30	2117	AAACCCGAATGACACGGCAGATAA	TTATCTGCCGTGTCATTCGGGTTT
	2118	AACCAGCGGATCGATAAAACGACA	TGTCGTTTTATCGATCCGCTGGTT
	2119	GGTGTCCACCCGTTAACGCCGGTA	TACCGGCGTTAACGGGTGGACACC
	2120	AGCGCGACGTGGCTTGCCGTTAAA	TTTAACGGCAAGCCACGTCGCGCT
	2121	TCCCACGGCTATAGGTCCAACGAC	GTCGTTGGACCTATAGCCGTGGGA
35	2122	ATCAACGAACGATGCCGTTAGGTG	CACCTAACGGCATCGTTCGTTGAT
	2123	GAGGCTAAGCCGTATGGCCGAGGC	GCCTCGGCCATACGGCTTAGCCTC
	2124	ACGGTCCGAAATGGTTAGAGGCAC	GTGCCTCTAACCATTTCGGACCGT
	2125	ACGCAAACCATTCCTCGAGTAGGC	GCCTACTCGAGGAATGGTTTGCGT
	2126	TTACACGCTCGCTATTGGGCCATA	TATGGCCCAATAGCGAGCGTGTAA
40	2127	CTCGGCACGGGTTTAGAACGCCGG	CCGGCGTTCTAAACCCGTGCCGAG
	2128	ATTCGGTAAGGTATCGGGCTAGCG	CGCTAGCCCGATACCTTACCGAAT

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	2129	AGCACACCGTTATACATGACGGCG	CGCCGTCATGTATAACGGTGTGCT
	2130	AGTCCCTGCCGTTCGCTCATGGAA	TTCCATGAGCGAACGGCAGGGACT
	2131	GGGCTTATGACCAGTCAGGTTGGA	TCCAACCTGACTGGTCATAAGCCC
	2132	GGTCACCACACGAGTGCCTGGTCT	AGACCAGGCACTCGTGTGGTGACC
5	2133	TTGATCGTGTCTCCCGAAACCCTC	GAGGGTTTCGGGAGACACGATCAA
	2134	ATTGTCGCGATCGGCATTTCTTAA	TTAAGAAATGCCGATCGCGACAAT
	2135	GGGTCCAACGACTTCTCGCTGCTG	CAGCAGCGAGAAGTCGTTGGACCC
	2136	CAAATTCCTTGGGGGCCATAGTGG	CCACTATGGCCCCCAAGGAATTTG
	2137	CCAGAGTATCCGCCGTTAGACGGT	ACCGTCTAACGGCGGATACTCTGG
10	2138	TCCTGCAGATCATCTCGTGTCTGG	CCAGACACGAGATGATCTGCAGGA
	2139	TGCGGGAGATTTGAACAAGCTGTA	TACAGCTTGTTCAAATCTCCCGCA
	2140	TTAGACGCCGAGCTAGGCAACGTC	GACGTTGCCTAGCTCGGCGTCTAA
	2141	TTTCGGCAGAATCTCCGATTCAAC	GTTGAATCGGAGATTCTGCCGAAA
	2142	TGGCGAGCAGACCTACAAGACAGA	TCTGTCTTGTAGGTCTGCTCGCCA
15	2143	GGCGACAGACCGGTACATCGGCCA	TGGCCGATGTACCGGTCTGTCGCC
	2144	TCTAGACCTGCGTTTCGTGGGACC	GGTCCCACGAAACGCAGGTCTAGA
	2145	GCCGAGCGTGGTACCATACGTTCA	TGAACGTATGGTACCACGCTCGGC
	2146	TAATCACACCCGCTTTCTGTGGCT	AGCCACAGAAAGCGGGTGTGATTA
	2147	GGCCGGAGCCATTGGACACTTCTT	AAGAAGTGTCCAATGGCTCCGGCC
20	2148	CCTGTAGACCTGCATGGATCGCTG	CAGCGATCCATGCAGGTCTACAGG
	2149	ATCGCCGTTCCCGCAAAATAAGCA	TGCTTATTTTGCGGGAACGGCGAT
,	2150	TGGATCAACGGGGTAGTGAAAACG	CGTTTTCACTACCCCGTTGATCCA
	2151	AAGCGACGATGCTTTCTTGAGCTG	CAGCTCAAGAAAGCATCGTCGCTT
	2152	CACGGGCACGTGTTCTACGCTTGC	GCAAGCGTAGAACACGTGCCCGTG
25	2153	ACGGGCTGGGACAAGAGCTAGAAA	TTTCTAGCTCTTGTCCCAGCCCGT
	2154	GGTAACTGGCTCCGCTCTCACATC	GATGTGAGAGCGGAGCCAGTTACC
	2155	ACTCTGGCTGTTGGCGAACGTGAC	GTCACGTTCGCCAACAGCCAGAGT
	2156	GACCGAGGACCAGTCCTTGCTCTC	GAGAGCAAGGACTGGTCCTCGGTC
	2157	AGTAGCTCTTGCGGCCTAACGGCA	TGCCGTTAGGCCGCAAGAGCTACT
30	2158	TTCTTGTCCTGGGGGAGAGCAGTG	CACTGCTCTCCCCAGGACAAGAA
	2159	TTAGCAGGGAGGTTGTCGGCTCAT	ATGAGCCGACAACCTCCCTGCTAA
	2160	AGAACGTGGATTGTACGCTCCGCC	GGCGGAGCGTACAATCCACGTTCT
	2161	CTTCACAGCCTGGAGCCACCAATG	CATTGGTGGCTCCAGGCTGTGAAG
	2162	GAGATCGATGAAACGCACCAGCGG	CCGCTGGTGCGTTTCATCGATCTC
35	2163	GGGTCCAGAGTTGGTGTGGGATAA	TTATCCCACACCAACTCTGGACCC
	2164	CCGTCCACCCCAGATAGGAATCAC	GTGATTCCTATCTGGGGTGGACGG
·,	2165	TGCCTCGCTTCTGTGAATCTACGA	TCGTAGATTCACAGAAGCGAGGCA
	2166	GATCACAGCGTCCGCGCATAACGG	CCGTTATGCGCGGACGCTGTGATC
Ī	2167	ATGACGCCTTACATGACGCACCTT	AAGGTGCGTCATGTAAGGCGTCAT
40	2168	GCGTGGAATAACGCCCTTAGTTCA	TGAACTAAGGGCGTTATTCCACGC
	2169	GGTCTACCATTTCTCGCCCGACCG	CGGTCGGGCGAGAAATGGTAGACC
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	2170	ACACCTCTCTGGCGTAGACGCTCA	TGAGCGTCTACGCCAGAGAGGTGT
	2171	GTAGAGGTGCTCAGGACTCGTCGC	GCGACGAGTCCTGAGCACCTCTAC
	2172	GTAAGCAGGAGGCGAAGGCGCGAA	TTCGCGCCTTCGCCTCCTGCTTAC
	2173	TCTAAGGGCCGTTTCAATCGACCT	AGGTCGATTGAAACGGCCCTTAGA
5	2174	AACCTGATTTCAGGGTCAGCCCGA	TCGGGCTGACCCTGAAATCAGGTT
	2175	GTCACGCGATTGGCCCACCTATTA	TAATAGGTGGGCCAATCGCGTGAC
	2176	ACGATGCCGCGCATGTAACCTAGT	ACTAGGTTACATGCGCGGCATCGT
	2177	TGAGAGATGTCTCGTCAACGCCTG	CAGGCGTTGACGAGACATCTCTCA
	2178	GCATATCTCGCGGTGACAGACGAA	TTCGTCTGTCACCGCGAGATATGC
10	2179	GACCCAACGTCGAAATTGTGCGAT	ATCGCACAATTTCGACGTTGGGTC
	2180	TGAAAATCGGGGCATCTAGTTTGG	CCAAACTAGATGCCCCGATTTTCA
	2181	CCGCGAAAAGGATTTGTGTACGCA	TGCGTACACAAATCCTTTTCGCGG
	2182	CATTCCATTTATCCGCAGTTCGCT	AGCGAACTGCGGATAAATGGAATG
	2183	CCTGTCTGTCGAGCCAGCGTCTAT	ATAGACGCTGGCTCGACAGACAGG
15	2184	TCAGCGCGGCTAAACAAGTTATGC	GCATAACTTGTTTAGCCGCGCTGA
	2185	ACGCCTACGAACGACCCAAGAGAG	CTCTCTTGGGTCGTTCGTAGGCGT
	2186	TGCGCATCTACCATTGTGTGGATC	GATCCACACAATGGTAGATGCGCA
	2187	AAGTCCGCGCTCGCTCCTGTAATA	TATTACAGGAGCGAGCGCGGACTT
	2188	GCTGGGTCATTGCTCGAGTAACCA	TGGTTACTCGAGCAATGACCCAGC
20	2189	TGGAGCGTTCTGGCAATGACCGAC	GTCGGTCATTGCCAGAACGCTCCA
•	2190	CAAGTCAATTCTTGGCCAATTCGG	CCGAATTGGCCAAGAATTGACTTG
	2191	CGTTCATGCAAGGATCCCAGGTTA	TAACCTGGGATCCTTGCATGAACG
	2192	ATGCCAATAGAAGCTGGGGATGCT	AGCATCCCCAGCTTCTATTGGCAT
	2193	CCTAACTCTCCCTTGAGGCCGTTC	GAACGGCCTCAAGGGAGAGTTAGG
25	2194	ATCTCGGCGAAGGTTCCAAACATT	AATGTTTGGAACCTTCGCCGAGAT
	2195	GCGACAGATTACGCTGCGGTTTTC	GAAAACCGCAGCGTAATCTGTCGC
	2196	AAGCCCAGACGGCCAACACGTTAC	GTAACGTGTTGGCCGTCTGGGCTT
	2197	TCAAGTTCAAATCACATCCCGTGG	CCACGGGATGTGATTTGAACTTGA
	2198	GATTGTCGTTCTGTCTGAGGCG	CGCCTCACAGACAACGACAATC
30	2199	ACCGAACTATGTTCCGGCATGGCA	TGCCATGCCGGAACATAGTTCGGT
	2200	CGTCATCGGGTGTGCAATGCCGTT	AACGGCATTGCACACCCGATGACG
	2201	CGGACGGAGTCACGTTTGTGCACT	AGTGCACAAACGTGACTCCGTCCG
	2202	TAAACAAGTCGTGTGCCTTTGCCG	CGGCAAAGGCACACGACTTGTTTA
	2203	TAATTACTGGCCTGTGGAGCAGGC	GCCTGCTCCACAGGCCAGTAATTA
35	2204	GGAGCGGCCCGAATGGTGCTCTTA	TAAGAGCACCATTCGGGCCGCTCC
	2205	ACTAAGCAAGGCTTGGATGTGCGT	ACGCACATCCAAGCCTTGCTTAGT
	2206	GGCAGCTCAGCGGCAGTACGCTAC	GTAGCGTACTGCCGCTGAGCTGCC
	2207	GCGAGGCGAATTATCCGCGGATTT	AAATCCGCGGATAATTCGCCTCGC
	2208	CATACGACACCTTGGGGTGCTA	TAGCACCCCAAGGTGTGTCGTATG
40	2209	TGCTTGGGCTTTAAACCCCGTTTT	AAAACGGGGTTTAAAGCCCAAGCA
	2210	CCGGTTGGAAAACGCAAATATCGG	CCGATATTTGCGTTTTCCAACCGG

	2211	AAACTAGCTAGCCGCACCCGCAAG	CTTGCGGGTGCGGCTAGCTAGTTT
	2212	GTTGTTCCACCAGTGATCACGCAG	CTGCGTGATCACTGGTGGAACAAC
	2213	GCCGCTGACAAGATGATCATCGTT	AACGATGATCATCTTGTCAGCGGC
	2214	CTTTCATAAAGCCAACCGATGCCC	GGGCATCGGTTGGCTTTATGAAAG
5	2215	CTGACTGCATCTCGAAAGCGGGTG	CACCCGCTTTCGAGATGCAGTCAG
	2216	ATTTCTTCGGAGAATCGGCCACGT	ACGTGGCCGATTCTCCGAAGAAAT
	2217	CATTTCGGGCCCTAGCTACTGCGC	GCGCAGTAGCTAGGGCCCGAAATG
	2218	CCGATCCCGCACATCCGTATCCTG	CAGGATACGGATGTGCGGGATCGG
	2219	TATCACCGGGAGCGTCTTATCGTG	CACGATAAGACGCTCCCGGTGATA
10	2220	TAGGGCTCGTGCACCGATTAGAGG	CCTCTAATCGGTGCACGAGCCCTA
	2221	GCGTGGCACTCGCTTGTCTAGGTA	TACCTAGACAAGCGAGTGCCACGC
•	2222	CTCAACGAACTCAAGGGCCGCTAC	GTAGCGGCCCTTGAGTTCGTTGAG
	2223	AGCCTGGTATCGACCAATCCTGCA	TGCAGGATTGGTCGATACCAGGCT
	2224	TACGCGTTCTAGTTGGCCGGATCC	GGATCCGGCCAACTAGAACGCGTA
15	2225	TTTATGGGTTTGTGCCTGATGGGT	ACCCATCAGGCACAAACCCATAAA
	2226	GGGACCCCTAGCAACGTCACCTTA	TAAGGTGACGTTGCTAGGGGTCCC
	2227	CTGCCTCCCAGGAGTCATTGGAT	ATCCAATGACTCCTGGGGAGGCAG
,	2228	AACCCCGCAAGACCAGTACCAATC	GATTGGTACTGGTCTTGCGGGGTT
i	2229	GGTCACATACGCGCTAAAAAGCGC	GCGCTTTTTAGCGCGTATGTGACC
20	2230	AAATGGCTCCGACCAGTTAGGGAC	GTCCCTAACTGGTCGGAGCCATTT
	2231	AACGCGGCACGCTTAAAGGTGCAT	ATGCACCTTTAAGCGTGCCGCGTT
	2232	GATCGCACGCCGATTAACCTTACA	TGTAAGGTTAATCGGCGTGCGATC
	2233	CCTCCTGATTGGGAGTGCGGAATT	AATTCCGCACTCCCAATCAGGAGG
	2234	CGGAGGGTAATAGGCTCCTCTGCG	CGCAGAGGAGCCTATTACCCTCCG
25	2235	ACAAGAACTGGACATTACCGCGGG	CCCGCGGTAATGTCCAGTTCTTGT
	2236	TGTCGTCTTAAAGGCCTTTGTGCG	CGCACAAAGGCCTTTAAGACGACA
	2237	GGTGACCATGTGGCGTTTTAGCTT	AAGCTAAAACGCCACATGGTCACC
	2238	CACGGTTGCGCACGGTACCAGAAC	GTTCTGGTACCGTGCGCAACCGTG
	2239	CCTTTATTGTTTGGTCCCCTGCCC	GGGCAGGGGACCAAACAATAAAGG
30	2240	GTGCGCCTGCATTCTACCGTCAAT	ATTGACGGTAGAATGCAGGCGCAC
	2241	GTTTACGTTGATGGCTTGCCGCCG	CGGCGGCAAGCCATCAACGTAAAC
	2242	CCGTCGGTGGTAGGACGTGAATGT	ACATTCACGTCCTACCACCGACGG
	2243	TGATCGCCCCAGAATCCCTGTGCT	AGCACAGGGATTCTGGGGCGATCA
	. 2244	AAGCAGCCAAAAATCGGTTGCTTT	AAAGCAACCGATTTTTGGCTGCTT
35	2245	CGACGGGACTTAGTAGCAGGGCCT	AGGCCCTGCTACTAAGTCCCGTCG
	2246	CCGATTCGCGAAACGACCAAGTAG	CTACTTGGTCGTTTCGCGAATCGG
	2247	CCACCCCAACTCCAATCTTTCTCA	TGAGAAAGATTGGAGTTGGGGTGG
	2248	GTGCAGTAGACGACTACCGGCGTC	GACGCCGGTAGTCGTCTACTGCAC
	2249	TTCGCCCATCGTATCAAGCAATTC	GAATTGCTTGATACGATGGGCGAA
40	2250	GAATCGCGACTACCCGTCGGGTCA	TGACCCGACGGGTAGTCGCGATTC
	2251	CCAGCACTCGCCATCGGTTATAAT	ATTATAACCGATGGCGAGTGCTGG

2252				
2254   TGGCTACCGCAGAATAAGGGTGA   TCACCCTTATTCTGCGGTAGCCCA   2255   TGGCCTGTCGTTCGAAAGAACA   TGTTTCCTTCGACAGGACAGGCCA   2256   GCCTCACCGATAGCGAGCAGGACAGGCAA   TGTTTCCTTCGACAGGACAGGCCA   2257   GTGCGCGCGGCGCGCACAAAACGAGACA   TGTTTCGTTTTAGCCGGCGCGCCAC   2258   CCCCAGACGAGTTTCTTGTGACAG   TGTCTCGTTTTAGCCGGCGCGCAC   2259   GTTCGCAATCGCGTGCAGAGACA   TGTCTCACCAGAAAACTCGTCTGCGG   2259   GTTCGCAATCGCGTGCAAAACGAAACCCGTGTACACAA   TCACCGGATGCATGCAGAAC   2260   TGTTGTACAACATCGCGTGAAA   TTCACCGGATGCATGCTGTGCAAC   2261   CACTGAACACATTAAAGGGCGCG   CGCGCCCTTATATCGTGTTCAGTG   2262   CGGGATGGTTTTAGGAAGACGAT   ATCGTCTTGCTAAGAACCATCGCG   2263   TACACCAAGGAAAATGGGGACG   CGTCCCATTTCTTCTTGGTGTA   2264   CGTGCCTTGCGTTTTAGGTGCAGC   CGTCCCATTTCTTCTTGGTGTA   2264   CGTGCCTTGCGTTTTAGGTGCAGC   CGTCCCATTTCTTCTTGGTGTA   2265   GTGGTTTTGTGGGGCATTAACGGC   CGCGTAATACCGCAACAAACGAC   CGTGCCCTAAAACGCACAACAGAC   CGTGCCCTAAAACGCAACACACCCA   CGCGCCTTAATGCCCAACAAACGAC   CCGACACACAACACACTTCCTCGCGTTAATCCCCAACAAACA		2252	CGAACCGTAGAACTCCGGTCGGTG	CACCGACCGGAGTTCTACGGTTCG
2255 TGGCCTGTCGTGTCGAAGGAACA TGTTTCCTCGACACGACA		2253	GCACCATGACAGAGCCCCAGGATG	CATCCTGGGGCTCTGTCATGGTGC
2256 GCCTCACCGATAGCGAGCGTTTGC 2257 GTGCGCGCCGGCTAAAACGAGACA 2258 CCGCAGACGAGTTTCTTGTGACAG 2259 GTTCGCATTCGGTGAAGC 2259 GTTCGCATCGCGTGCTAGGAAGC 2259 GTTCGCATCGCGTGCTAGGAAGC 2259 GTTCGCATCGCGTGCTAGGAAGC 2250 TGTTGTACACATGCATCCGGTGAA 1TCACCGGATGCATGCAGCAGCAACC 2261 CACTGAACACGCATTCAGGAAGC 2262 CGCGATGGTTCTTAGCAGAGCGCGCCCCTTATATCGTGTTCAGTG 2262 CGCGATGGTTCTTAGCAAGACGAT 2263 TACACCAAGGAAAATGGGGACG 2264 CGTGCCTTTAGCGTTTAGCAAGACCATTCTCTGGTGT 2264 CGTGCCTTTGCGTTTAACGGC 2265 GTCGTTTGTCTGGGTTAACGGC 2266 CAGGCCTTGATACGGC 2266 CAGGCTCTCGTTTCAGCAACCAC 2266 CAGGCTCTCGTTCGGTACAAACCT 2267 CGGACACTGTTCAGCAGC 2268 TACCCATGATGCGGAACACCCA 2268 TACCCATGATGCGGAACACCCA 2269 CTGTCCTTAAGCGGAACACCCA 2269 CTGTCCTTAAGCGGAACACCCA 2270 CGGGAGATGAGCAGCAGCTGCCCCTTTCTCCCGCTTCATGCTCC 2271 TAGATCCGGATGAGACCC 2271 TAGATCGCGACTGACCCAATCCCCCTTTATACCGCACCATACACCACCACCACCACCACCACCACCACCACCAC		2254	TGGGCTACCGCAGAATAAGGGTGA	TCACCCTTATTCTGCGGTAGCCCA
2257 GTGCGCGCGGCTAAAACGAGACA TGTCTCGTTTTAGCCGGCGCGCAC 2258 CCGCAGACGAGTTTCTTGTGACAG CTGTCACAAGAAACTCGTCTGCGG 2259 GTTCGCAATCGCGTGCTAGGAAGC GCTTCCTAGCACGCGATTGCGAAC 2260 TGTTGTACACATGCATCCGGTGAA TTCACCGGATGCACAGCAATCACGTGTTAGACACCATGCACCAGCAATTCAGACCACCATTAAACGCACCATTTATACGTGTACAACC 2261 CACTGAACACGATATAAGGGCGC CGCGCCCTTATATCGTGTTACAGTG 2262 CGCGATGGTTCTTAGCAAGACGAT ATCGTCTTGCTAGAACCATCGCG 2263 TACACCAAGGAAGAAATGGGGAC CGTCCCCATTTCTTCCTTGGTGTA 2264 CGTGCCTTGCGTTTTAGGTGCAGC GCCGTTAAACGCAAGCACAACGAC 2265 GTCGTTTGTCTGGGCATTAACGCC GCCGTTAATGCCCAGACAAACGAC 2266 CAGGCTCTCGTTCGGTACAAACCT ACGTTTGTACCGAACCAAACGAC 2267 CGGACACTGTTTCACCAGAACCCA TGGGTTCTGGTGAAAACAGTGCCG 2268 TACCCATGATGCGGAAGAACCA TGGGTTCTGGTGAAAACAGTGCCG 2268 TACCCATGATGCGGAAGAACCA TGGGTTCTGCTCACACAACGAC 2270 CGGGAGATGAGAACCG CGGTTCTCATCCCGCTTAAGGACAG 2270 CGGGAGATTGAGGAACCCA TGGGTTCTCATCCCGCTTAAGGACAG 2271 TAGATCGCGACTGTACTCAGGCCC CGGCCTGAACTGTCTCTCCCG 2271 TAGATCGCGACTGTACTCAGGCCC CGGCCTGACTACGCGACTGTTTTA 2272 TAAAACAGTTCGCGCGACTGTCCT ACGACACACCCGAACTGTTTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGAGCTCCTCGCACCATCACCCACCACCACCACCACCACCACCACCACCAC		2255	TGGCCTGTCGTGTCGAAGGAAACA	TGTTTCCTTCGACACGACAGGCCA
2258 CCGCAGACGAGTTTCTTGTGACAG 2259 GTTCGCAATCGCGTGCTAGGAAGC 2260 TGTTGTACACATCAGCATCGCGTGAA TTCACCGGATGCATGCGAAC 2261 CACTGAACACGACTACAGCGCGTGAA TTCACCGGATGCATGTTCAGTGA 2261 CACTGAACACGATATAAGGGCGCG CGCCCCTTATATCGTGTTCAGTG 2262 CGCGATGGTTCTTAGCAAGACGAT ACGTCTTGCTAAGAACCATCGCG 2263 TACACCAAGGAAGAAATGGGGACG CGCCCCTTATATCGTGTTCAGTG 2264 CGTGCCTTGCGTTTTAGGAAGACGAT ACGTCTTCCTTGGTGTA 2265 GTCGTTTGCTGGGCATTAACGGC CGCCCTTAATGCCAAGCAACGA 2265 GTCGTTTGCTGGGCATTAACGGC CGCGCCTAAAACGCAACGAACGAACGACAACGACAACGAC ACGTTTGTCTCGGACCAACGAACCGA CGGACACTGTTTCACCAGAACCGA CGGGCACACGAACACGAACCGA CGGACACTGTTTCACCAGAACCGA CGGTTCTGTCGCAACAGGAACCGA CGGGCCTTAAGGGAAGAACGGACAACGGACAACAGACACACGACAACGACAACGACAACGACAACGACAACGACACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACAACGACACACACACACACACACACACACACACACACACACACAC	<b>.</b> 2	2256	GCCTCACCGATAGCGAGCGTTTGC	GCAAACGCTCGCTATCGGTGAGGC
2259 GTTCGCAATCGCGTGCTAGGAAGC 2260 TGTTGTACACATGCATCCGGTGAA TTCACCGGATGCATGTGTACACAC 2261 CACTGAACACGATATAAGGGCGCG CGCGCCCTTATATCGTGTTCAGTG 2262 CGCGATGGTTCTTAGCAAGACGAT ATCGTCTTGCTAAGAACCATCCGGT 2263 TACACCAAGGAAGAATGGGGACG CGCCCCTATATCGTGTTCAGTG ATCGTCTTCATCAGTGAACACCATCCGG CGCGCCCTTATCCGTTCAGTGAACACCATCCGC CGCGCCCTTATCCGTTCAGTGAACACCATCCGCG CGCGCCCTAAACCGAACCACCACCACCACACACCACCACCACCACCAC		2257	GTGCGCCCGGCTAAAACGAGACA	TGTCTCGTTTTAGCCGGCGCGCAC
2260 TGTTGTACACATGCATCCGGTGAA  10 2261 CACTGAACACGATATAAGGGCGCG  2262 CGCGCTGTATATCGTGTTCAGTG  2262 CGCGCATGGTTCTTAGCAAGACGAT  2263 TACACCAAGGAAGAAGAGGAT  2264 CGTGCCTTGCGTTTAGGAGGACGA  2265 TACACCAAGGAAGAATAGGGCAC  2266 CGTCCCCATTTCTCCTTGGTGTGA  2267 CGGCCTTGCGTTTAGGTGCAGC  2268 GTCGTTTGTCTGGGCATTAACGGC  2267 CGGACACTGTTCGGTACAAACGT  2268 CAGGCTCTCGTTCGGTACAAACGT  2269 CTGCCCTTAAGGGCAT  2269 CTGCCCTTAAGGGGAACCCA  2270 CGGGAGATGAGGAACCC  2271 TAGATCGGGAACAGAACGT  2272 CGGGAGATGAGAACGGTA  2272 CGGGAGATGAGAACGGTA  2272 TAAAACAGTTCGCGCAACAACGTA  2273 CGAGGACTCTACTCAGGCCC  2274 TGGCTACACAAACGCAATAGCCCAAT  2275 AGGATTGGGGAACACGCAAT  2276 TGTACTACCGCCACATAAGCCCAAT  2277 TGCCTACGCCTGAAGCACAAT  2277 TGCCTACGCCTGAAGCACGCAAT  2278 TGGCTACGCCTGAAGCAGGTAACACCCAATCCCCCAACACAACCACCAATCCT  2279 TGCCGCAAGAACACGTTTCTCAAGCCCAATCACCCCCAACACACCCCAATCCCCCAACACACACCCAATCCT  2278 TGCCTACGCCCCTGAAGCACGCC  2279 TGCCCTACGCCCTGAACCACTCACTCACCCCAACCCCAATCCCCCCAACCCCAATCCCCCC		2258	CCGCAGACGAGTTTCTTGTGACAG	CTGTCACAAGAAACTCGTCTGCGG
10 2261 CACTGAACACGATATAAGGGCGCG CGCGCCCTTATATCGTGTTCAGTG 2262 CGCGATGGTTCTTAGCAAGACGAT ATCGTCTTGCTAAGAACCATCGCG 2263 TACACCAAGGAAGAAATGGGGACG CGTCCCCATTTCTTCCTTGGTGTA 2264 CGTGCCTTGCGTTTTAGGTGCAGC CGTCCCCATTTCTTCCTTGGTGTA 2265 GTCGTTTGTCTGGGTTAACGGC GCCGTTAATGCCCAAACGAC 2266 CAGGCTCTCGTTCGGTACAAACGT ACGTTTAATGCCCAAACGAC 2267 CGGACACTGTTTCACCAGAACCCA TGGGTTCTGTCACAACGAC 2268 TACCCATGATGCCGAAACCAC TGGGTTCTGTCACAACGAC 2269 CTGTCCTTAAGCGGAAGAACCCA TGGGTTCTGTCACAACGAC 2270 CGGGAGATGAGAACCG CGGTTCTCATCACGCATCATGGGTA 2269 CTGTCCTTAAGCGGATGAGAACCG CGGTTCTCATCCGCTTAAGGACAG 2271 TAGATCGCGACTGTCGT ACCAAAAACCGTTCTCACCGCTTAAGGACAG 2272 TAAAACAGTTCCGCGCACTTCGT ACGACAGTCGCGATCTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTAATGGGTACTCTCACCGCACACACACACCCAATCCCCACACACA		2259	GTTCGCAATCGCGTGCTAGGAAGC	GCTTCCTAGCACGCGATTGCGAAC
2262 CGCGATGGTTCTTAGCAAGACGAT ATCGTCTTGCTAAGAACCATCGCG 2263 TACACCAAGGAAGAAATGGGGACG CGTCCCCATTTCTTCCTTGGTGTA 2264 CGTGCCTTGCGTTTTAGGTGCAGC GCTGCACCTAAAACGCAAGGCACG 2265 GTCGTTTGTCTGGGCATTAACGGC GCCGTTAATGCCCAGACCAAACGAC 2266 CAGGCTCTCGTTCGGTACAAACGT ACGTTTGTACCGAACGAACGAACGAC 2267 CGGACACTGTTCACCAGAACCCA TGGGTTCTGGTGAAACAACGT 2268 TACCCATGATGCGGAAGAACCCA TGGGTTCTGGCGATCATGGGTA 2269 CTGTCCTTAAGCGGAAGAACCCA TGGGTTCTGCGCATCATGGGTA 2269 CTGTCCTTAAGCGGATGAGAACCC CGGTTCTCTCGCATCATGGGTA 2269 CTGTCCTTAAGCGGATGAGAACCC CGGTTCTCATCCGCTTAAGGACAG 2270 CGGGAGATGAGAACCG CGGTCTCATCCGCTTCAAGGACAG 2271 TAGATCGCGACTGTCGT ACGACAAAACCGTTCTCATCCCG 2272 TAAAACAGTTCGCGCGACTGTCGT ACGACAGTCCCCGAACCTGTTTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTAATGGGCAACCCAATCCT 2274 TGGCTAGGGGAATCATCTT AAGATGATCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGGATGCATTG 2276 TGTATCTACCGGCCTGAAGCAGGT ACTGCTCAAGGCACCCAATCCT 2277 TCCCTACGCGCATGACTCGCTTAC 2278 TGGTCGATCACTGGACAGACGC GCGTCTGTCACAGGCACCCAATCCT 2280 CCCCCCAGGATTACTATCCGA 2280 CCCCCAGGATTACTATCCGA 2280 CCCCGCCAGGAACACCCGTCAACCAG 2280 CCCCCACGAGGATTACATTCC 2281 TCCCGCACGGGAATTCATTCCGA 2282 GTGATGTGCAGGAACCTCTTCACCCCA 2283 ATTTAGGCATGCATCATTCCGC 2284 TTCGGCGCTAGGGAACCTCTTCACCCCA 2285 GACACCTCCATCACTACACC 2286 GACACACTCCACTCATCCCCA 2287 GGCCAAGGAACTTCTTCACCCCCA 2288 GTTCGCCAAGGAACTTCTTCACCCCCACACCCAACCCCAACCCCAACCCCAACCCCAACCCC		2260	TGTTGTACACATGCATCCGGTGAA	TTCACCGGATGCATGTGTACAACA
2263 TACACCAAGGAAGAAATGGGGACG CGTCCCCATTTCTTCCTTGGTGTA 2264 CGTGCCTTGCGTTTTAGGTGCAGC GCTGCACCTAAAACGCAAGGCACG 2265 GTCGTTTGTCTGGGCATTAACGGC GCCGTTAATGCCCAGACAACGAC 2266 CAGGCTCTGTTCGGTACAAACGT ACGTTTGTACCGAACGACGACAAACGAC 2267 CGGACACTGTTTCACCAGAACCCA TAGGTTCTGCTGAAACAGTCTCC 2268 TACCCATGATGCGGAAGAACCCA TGGGTTCTGCTCATCCATCATGGTA 2269 CTGTCCTTAAGCGGAAGAACCGT TACGCTTCATCCCGATCATGGGTA 2269 CTGTCCTTAAGCGGATGAGAACCG CGGTTCTCATCCCGCTTAATGGACAG 2270 CGGGAGATGAGAACCGTTTTTGTGC GCACAAAACCGTTCTCATCTCCCG 2271 TAGATCGCGACTGTACTCAGGCCG CGGCCTGAGTACAGTCGCGATCTA 2272 TAAAACAGTTCGCGCGACTGTCGT ACGACAGAACCGTTCTCATCTCCCG 2274 TGGCTAGGGATGAGACCCAAT ATTGGGCTTATGTGGAGCTCCTCG 2274 TGGCTAGGGATGAGACCCAAT ATTGGGCTTATGTGGAGCTCCTCG 2275 AGGATTGGGTGCCTGATACATCTT AAGATGATTCCCCATCCCTAGCCA 2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCACCCAATCCT 2277 TCCCTACCGCGCATGACCAGT ACCTGCTTCAGGCACCCAATCCT 2277 TCCCTACCGCGCATGACCAGGT ACCTGCTTCAGGCACCCAATCCCT 2278 TGGTCGATCACCTGTGACCAGACCG GCGTCTGTCACAGGGACCCCAATCCC 2279 TGGGGGTAGTCCATCGATCATTG CAATTGATGCATGGACTCACCCCA 2279 TGGGGGTAGTCCATGCATCATTG CAATTGATGCATGGACTACCCCCA 2280 CCCTGCCAGGGTAATCATTTCCGGA TCCGGAATAGTAATCCTCGCACACCCACCCCAATCACT 2281 TCCCGCACGGGGAATTTAAGTAGA TCCTCTAAATTCCCCGTACGACACC 2282 GTGATTGCAGGACCGC GCGTCTGTCACAGGCACCCAATCAC 2283 ATTTAGGCATGCATCATTCGCC GCGGAACGAAGTTCCTCGCCAACAC 2284 TTCCGGCATGGACCGCTTCAA TGAGAAGCGCATGCATGCCCCAA 2285 GACTTCATCTACTGTCGC GCGGAACGAAGTTCCTGCACATCAC 2286 GACACTCCACTGCATCCATCCAC TGAGAAGCCCATCACACACACACACACACACACACACACA	10	2261	CACTGAACACGATATAAGGGCGCG	CGCGCCCTTATATCGTGTTCAGTG
2264 CGTGCCTTGCGTTTTAGGTGCAGC GCTGCACCTAAAACGCAAGGCACG 2265 GTCGTTTGTCTGGGCATTAACGGC GCCGTTAATGCCCAGACAAACGAC 2266 CAGGCTCTCGTTCGGTACAAACGT ACGTTTGTACCGAACGACAAACGAC 2267 CGGACACTGTTTCACCAGAACCCA TGGGTTCTGGTGAAACAGTGTCCG 2268 TACCCATGATGCGGAAGAACCCA TGGGTTCTGCGACACAACGTGTCCG 2269 CTGTCCTTAAGCGGAAGAACCG CGGTTCTATCCGCTTAAGGACAG 2270 CGGAGAGTGAGAACCG CGGTTCTATCCGCTTAAGGACAG 2271 TAGATCGCGACTGTACTCAGGCCG CGCCCTGAGTACAGTCGCGAACTCTA 2272 TAAAACAGTTCGCGCGACTGTCGT ACGACAGTCACGCGCATCATTTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGAGCTCCTCG 2274 TGGCTAGGGATGGGGAATCATCTT AAGATGACTCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGGATGCATTG 2276 TGTATCTACCGGCCTGAAGCAGT ACCTCCATCCCTAGCCA 2277 TCCCTACCGCGCATGACCCTTAC 2278 TGGTCGATCACTTGAGCCGTACATCACCCCAATCCT 2279 TGGGGGTAGTCACTTCAGCCCTTAC 2279 TGGGGGTAGCACTGCCTTAC 2280 CCCTGCCAGGATTACTATTG CAATGATCACAGCCCCA 2280 CCCTGCCAGGATTACTATTCCGGA TCCGGAATAGTCACCCCA 2281 TCCCGCACGGGAATTCTATTCCGGA TCCATTAAATTCCCCGTGCGGAA 2282 GTGATGTGCAGAACTCTCTTCA TGCAGAAAGTACTCTGGCAGGA 2283 ATTTAGGCATGCATCAATTG CAATTGAATTCCCCGTGCGGGA 2284 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2285 GAACTCCATGCATCAATT TGCAGACAGAACTTCCTCACAATCAC 2284 TTCGGCGCTAGGGCGTTCCA TGAGAAGCGCTCCACATGCCTAAAT 2284 TTCGGCGCTAGTGGACCGCTCCAA TTGACAGCGCTCCACATCACT 2285 GACACTCCATCCATCACAT TGCAGCAGCACTCAATGAACTCCTCAAATCACCCCAATCCCCCA 2286 GACAACTCCACTGCACCACTCCCA TGCAATAGCACTGAACTGCACAAATTCCCCCAACCCCAACCCCAATCCCCCAACCCCAATCCCCCAACCCCAATCCCCCAACCCCAATCCCCCAACCCCAATCCCCCAACCCCCAACCCCAATTCAACCCCCAACCCCAATTCCACTCCCCCC		2262	CGCGATGGTTCTTAGCAAGACGAT	ATCGTCTTGCTAAGAACCATCGCG
2265 GTCGTTTGTCTGGGCATTAACGGC GCCGTTAATGCCCAGACAAACGAC 2266 CAGGCTCTCGTTCGGTACAAACGT ACGTTTGTACCGAACGAGAGGCCTG 2267 CGGACACTGTTTCACCAGAACCCA TGGGTTCTGGTGAAACAGTGTCCG 2268 TACCCATGATGCGGAAGAGACCCA TGGGTTCTCGCATCATGGGTA 2269 CTGTCCTTAAGCGGATGAGAACCG CGGTTCTCATCCGCTTAAGGACAG 2270 CGGGAGATGAGAACCG CGGTTCTCATCCGCTTAAGGACAG 2271 TAGATCGCGATTGACTCAGGCCG CGGCCTGAGTACAGTCGCGCATCAT 2272 TAAAACAGTTCGCGCGACTGTCCT ACGACAGTCGCGGATCTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGGAGCTCGCA 2274 TGGCTAGGGGAATCATCTT AAGATGATTCCCCATCCCTAGCCA 2275 AGGATTGGGTGGGAATCATCTT AAGATGATTCCCCATCCCTAGCCA 2276 TGTATCTACCGGCCTGAAGCAGT ACTGCTCAGGCACCCCAATCCT 2277 TCCCTACGGCCTGAAGCAGGT ACCTGCTCAGGCACCCCAATCCT 2278 TGGTCGATCACCTGTGACAGACGC GCGTCTGCACAGGACCCCAATCCA 2279 TGGGGGTAGTCCATCAATTG CAATGCATCACAGGCACCCCAA 2279 TGGGGGTAGTCCATCAATTG CAATGCATCACAGGCACCCCAA 2279 TGGGGGTAGTCCATCAATTG CAATGCATGACACGCAC 2280 CCCTGCCAGGAATTACTATTCCGGA TCCGGAATAGCTACCCCCA 2280 CCCTGCCAGGAATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG 30 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2282 GTGATGTCAGCTGCCTCCAA TTGAGAACGCACTCAACTCA		2263	TACACCAAGGAAGAAATGGGGACG	CGTCCCCATTTCTTCCTTGGTGTA
15 2266 CAGGCTCTCGTTCGGTACAAACGT ACGTTTGTACCGAACGAGGAGCCTG 2267 CGGACACTGTTTCACCAGAACCCA TGGGTTCTGGTGAAACAGTGTCCG 2268 TACCCATGATGCGGAAGAAGACCGA TACGCTTCTTCCGCATCATGGGTA 2269 CTGTCCTTAAGCGGATGAGAACCG CGGTTCTCATCCGCTTAAGGACAG 2270 CGGGAGATGAGAACCG CGGTTCTCATCCGCTTAAGGACAG 2270 CGGGAGTGAGAACCG CGGCTCAACACCGTTCTCATCTCCCG 2271 TAGATCGCGACTGTACTCAGGCCG CGGCCTGAGTACAGTCGCGATCTA 2272 TAAAACAGTTCGCGCGACTGTCGT ACGACAGTCGCGCGAACTGTTTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGAGCTCCTCG 2274 TGGCTAGGGAGGGAATCATCTT AAGATGATTCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGGATGCATT AAGATGATTCCCCATCCCTAGCCA 2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGCGAACTCCT 2277 TCCCTACCGCCATGACCACTAC GTAAGCCAGTCACCGGTAGATACA 2277 TCCCTACGCGCATGACTCACTTAC GTAAGCGAGTCACTGCCCCAGCACCCATCCCT 2278 TGGTCGATCACTGTGACAGACGC GCGTCTGTCACAGGTGATCGACCA 2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGACGACCA 2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGAACCACCA 2280 CCCTGCCAGGATTACTATTCCGGA TCCCGAAATATCCTGGCAGGA 2281 TCCCGCACGGGGAATTTACATTCCGGA TCCCGAATAGTAATCCCCCCA 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC 2283 ATTTAGGCATGCATCACTTCAT TGAGGCCGTCCACTAGCCCCAAAT 2284 TTCGGCGCTAGTGACGCCCTCAA TTGACGGCCGTCACATCAC 2285 GAGCTTCATCTCATCAGTTCCGC CGCGGAACTGAAGGTCCTAAAT 2286 GACAACTCCACTGCCTCCAATCGCA TCCGCTCACTAGCGCCGAA 2287 GGCCAAGGATGGACCCTTCCA TGCGCTCACTAAGGTCCACTAACCCCCAACCCCCCAACCCCCAACCCCCCCC		2264	CGTGCCTTGCGTTTTAGGTGCAGC	GCTGCACCTAAAACGCAAGGCACG
2267 CGGACACTGTTTCACCAGAACCCA TGGGTTCTGGTGAAACAGTGTCCG 2268 TACCCATGATGCGGAAGAAGCGTA TACGCTTCTTCCGCATCATGGGTA 2269 CTGTCCTTAAGCGGATGAGAACCG CGGTTCTCATCCGCTTAAGGACAG 2270 CGGGAGATGAGAACCG CGGTTCTCATCCCGCTTCATCCCCG 2271 TAGATCGCGACTGTACTCAGGCCG CGCCTGAGTACAGTCGCGATCTA 2272 TAAAACAGTTCGCGCGACTGTCGT ACGACAGTCGCGGACTGTTTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGAGCTCCTCG 2274 TGGCTAGGGAATCATCTT AAGATGATTCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGGATGCATTG 2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTACGCCA 2277 TCCCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGTAGATACA 2277 TCCCTACGGCCTGAAGCAGGT ACCTGCTTCAGGCCGTAGATACA 2278 TGGTCGATCACCTGTGACAGACGC GCGTCTGTCACAGGTGATCGCCCA 2279 TGGGGGTAGTCCATGATTG CAATTGATGCACCAGACCCCA 2279 TGGGGGTAGTCCATCATTG CAATTGATGCACTAGCCCCA 2280 CCCTGCCAGGATTACTATTCCGGA TCCGGAATAGTACACCCCA 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCGGTCGGGGA 2282 GTGATGTGCAGGACTTCTCCA TGACAAGAGGTCCCCCACTCAC 2283 ATTTAGGCATGCATCACTCTCA TGACAAGAGCGCATGCATGACTACACCCCACCC		2265	GTCGTTTGTCTGGGCATTAACGGC	GCCGTTAATGCCCAGACAAACGAC
2268 TACCCATGATGCGGAAGAAGCGTA TACGCTTCTTCCGCATCATGGGTA 2269 CTGTCCTTAAGCGGATGAGAACCG CGGTTCTCATCCGCTTTAAGGACAG 2270 CGGGAGATGAGAACCG CGGTTCTCATCCGCTTTAAGGACAG 2271 TAGATCGCGACTGTACTCAGGCCG CGGCCTGAGTACAGTCGCGATCTA 2272 TAAAACAGTTCGCGCGACTGTCGT ACGACAGTCGCGCGACTGTTTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGAGCTCCCCAGCCA 2274 TGGCTAGGGATGGAGCACTGTCTT AAGATGATTCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGGATGCATTG CAATGCATCCAGCCCAATCCT 2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCCGATGATACA 2277 TCCCTACGCGCATGACTCGCTTAC GTAAGCCGAGTCATGCCCAATCCACCACCCCAATCCCT 2278 TGGTCGATCACCTGTGACAGACGC GCGTCTGTCACAGGGACTCACCCA 2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGACCACCACCCACCCCAC	15	2266	CAGGCTCTCGTTCGGTACAAACGT	ACGTTTGTACCGAACGAGAGCCTG
2269 CTGTCCTTAAGCGGATGAGAACCG CGGTTCTCATCCGCTTAAGGACAG 2270 CGGGAGATGAGAACGGTTTTGTGC GCACAAAACCGTTCTCATCTCCCG 2271 TAGATCGCGACTGTACTCAGGCCG CGGCCTGAGTACAGTCGCGATCTA 2272 TAAAACAGTTCGCGCGACTGTCGT ACGACAGTCGCGCGAACTGTTTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGAGCTCCTCG 2274 TGGCTAGGGATGGGGAATCATCTT AAGATGATCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGATGCATTC CAATGCATCCAGGCACCCAATCCT 2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGGTAGATACA 2277 TCCCTACGCGCATGACTCGCTTAC GTAAGCCGATCATCGCGACCCAATCCCT 2278 TGGTCGATCACTGGATGCATCACTTG CAATTGATGCACGAGGACCCAATCCCA 2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGAGCACCA 2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGAGCACCA 2280 CCCTGCCAGGAATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC 2283 ATTTAGGCATGCATCACTTCAATTG TGAGAAGCGCATGCATGACTCAC 2284 TTCGGCGCTAGTGACACCCGCTCAA TTGACGGCGTCCACATCAC 2285 GAGCTTCATCTCATCAGTTCCGC GCGGAACTGATGAGATGA		2267	CGGACACTGTTTCACCAGAACCCA	TGGGTTCTGGTGAAACAGTGTCCG
2270 CGGGAGATGAGAACGGTTTTGTGC GCACAAAACCGTTCTCATCTCCCG 2271 TAGATCGCGACTGTACTCAGGCCG CGGCCTGAGTACAGTCGCGATCTA 2272 TAAAACAGTTCGCGCGACTGTCGT ACGACAGTCGCGGAACTGTTTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGAGCTCCTCG 2274 TGGCTAGGGATGGGGAATCATCTT AAGATGATTCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGGATGCATTG CAATGCATCCAGCCAATCCT 2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGGTAGATACA 2277 TCCCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGGTAGGAA 2278 TGGTCGATCACTGGACTCGCTTAC GTAAGCGAGCCGCGTAGGGA 2279 TGGGGGTAGTCCATGAATTG CAATTGATGCACGCAGCACCCA 2280 CCCTGCCAGGATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG 2281 TCCCGCACGGGAATTTACAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2282 GTGATGTCAGGACTCTCTCTC TCAGAAAGCGCATGCACCACACCCACCCACCCACCCCAC		2268	TACCCATGATGCGGAAGAAGCGTA	TACGCTTCTTCCGCATCATGGGTA
2271 TAGATCGCGACTGTACTCAGGCCG CGGCCTGAGTACAGTCGCGATCTA 2272 TAAAACAGTTCGCGCGACTGTCGT ACGACAGTCGCGCGAACTGTTTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGAGCTCCTCG 2274 TGGCTAGGGATGGGGAATCATCTT AAGATGATTCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGGATGCATTG CAATGCATCCCCATCCCTAGCCA 2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGGTAGATACA 2277 TCCCTACGGGCATGACTCGCTTAC GTAAGCGAGTCATGCGCGAGACCAATCCT 2278 TGGTCGATCACCTGTGACAGACGC GCGTCTGTCACAGGTGATCGACCA 2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCACGAGCACCAATCCCCA 2280 CCCTGCCAGGATTACTATTCCGGA TCCCGGAATAGTAATCCTGGCAGGG 30 2281 TCCCGCACGGGAATTACTATTCCGGA TCCCGGAATAGTAATCCTGGCAGGG 2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC 2283 ATTTAGGCATGCATCACTTCTCCC GCGACAGAAGTTCCTGCACATCAC 2284 TTCGCCGCAGGACTTCTCCA TGAGAAGCGCATGCATCACATCA		2269	CTGTCCTTAAGCGGATGAGAACCG	CGGTTCTCATCCGCTTAAGGACAG
2272 TAAAACAGTTCGCGCGACTGTCGT ACGACAGTCGCGCGAACTGTTTTA 2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGAGCTCCTCG 2274 TGGCTAGGGATGGGGAATCATCTT AAGATGATTCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGGATGCATTG CAATGCATCCAGGCACCCAATCCT 2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGTAGATACA 2277 TCCCTACGCGCATGACTCGCTTAC GTAAGCGAGTCATGCGCGTAGGAC 2278 TGGTCGATCACCTGTGACAGACGC GCGTCTGTACAGGTGATCGACCA 2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGACTACCCCCA 2280 CCCTGCCAGGATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG 30 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC 2283 ATTTAGGCATGCATCCATCAAT 2284 TTCGGCGCTAGTGGACGCCTTCA TGACGAGCGCTCACATGACTCAC 2285 GAGCTTCATCTCATCAGTTCCGC CGCGGAACTGATGAGATGA		2270	CGGGAGATGAGAACGGTTTTGTGC	GCACAAAACCGTTCTCATCTCCCG
2273 CGAGGAGCTCCACATAAGCCCAAT ATTGGGCTTATGTGGAGCTCCTCG 2274 TGGCTAGGGATGGGGAATCATCTT AAGATGATTCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGGATGCATTG CAATGCATCCAGCACCCAATCCT 2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGGTAGATACA 2277 TCCCTACGCGCATGACTCGCTTAC GTAAGCGAGTCATGCGCGTAGGGA 2278 TGGTCGATCACCTGTGACAGACGC GCGTCTGTCACAGGTGATCGACCA 2279 TGGGGTAGTCCATGCATCAATTG CAATTGATGCATGGACTACCCCCA 2280 CCCTGCCAGGAATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG 30 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC 2283 ATTTAGGCATGCATGCGCTTCTCA TGAGAAGCGCATGCATCACC 2284 TTCGGCGCTAGTGGACCCCGTCAA TTGACGAGCGATGCATGACCTAAAT 2284 TTCGGCGCTAGTGGACCCCGTCAA TTGACGGCGGAACCCCGAA 2285 GACATCCACTGCTCCAATCGCA TGCGATTGAGATGAAGCTC 35 2286 GACAACTCCACTGCTCCAATCGCA TGCGATTGGAGCAGTGGAGTTGTC 2287 GGCCAAGGATGGACCTTACGATG CCATCGTAAGTTCCGCC 2288 GGTTCCGGAATTTGTCACCGCTTC GAAGCGGTGCACACTCTCTTGGCC 2289 GCCTGGATAGTCTCCCACTGCTCCAATCGCACCCCAAATTCCGGAACC 2289 GCGCTGGATAGTCTGCGAGAAGCC GGCTTCTCCCAGACCTACACCCCATTCCACCCCCACCACCCCAATTCCACCCCCACCCCAATTCCACCCCCACCCCAATTCCACCCCCACCCCCAATTCCACCCCCC	20	2271	TAGATCGCGACTGTACTCAGGCCG	CGGCCTGAGTACAGTCGCGATCTA
2274 TGGCTAGGGATGGGGAATCATCTT AAGATGATTCCCCATCCCTAGCCA 2275 AGGATTGGGTGCCTGGATGCATTG CAATGCATCCAGCCACCCAATCCT 2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGGTAGATACA 2277 TCCCTACGCGCATGACTCGCTTAC GTAAGCGAGTCATGCGCGTAGGA 2278 TGGTCGATCACCTGTGACAGACGC GCGTCTGTCACAGGTGATCGACCA 2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGGACTACCCCCA 2280 CCCTGCCAGGGAATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG 30 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC 2283 ATTTAGGCATGCATCCGCTTCTCA TGAGAAGCGCATGCATGCCTAAAT 2284 TTCGGCGCTAGTGGACCCCGTCAA TTGACGGCGTCCACTAGCGCCGAA 2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAGATGA		2272	TAAAACAGTTCGCGCGACTGTCGT	ACGACAGTCGCGCGAACTGTTTTA
2275 AGGATTGGGTGCCTGGATGCATTG CAATGCATCCAGGCACCCAATCCT  2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGGTAGATACA  2277 TCCCTACGCGCATGACTCGCTTAC GTAAGCGAGTCATGCGCGTAGGGA  2278 TGGTCGATCACCTGTGACAGACGC GCGTCTGTCACAGGTGATCGACCA  2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGGACTACCCCCA  2280 CCCTGCCAGGATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG  30 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA  2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC  2283 ATTTAGGCATGCATGCGCTTCTCA TGAGAAGCGCATGCATGCCTAAAT  2284 TTCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCACTAGCGCCGAA  2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAGATGA		2273	CGAGGAGCTCCACATAAGCCCAAT	ATTGGGCTTATGTGGAGCTCCTCG
2276 TGTATCTACCGGCCTGAAGCAGGT ACCTGCTTCAGGCCGGTAGATACA 2277 TCCCTACGCGCATGACTCGCTTAC GTAAGCGAGTCATGCGCGTAGGGA 2278 TGGTCGATCACCTGTGACAGACGC GCGTCTGTCACAGGTGATCGACCA 2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGGACTACCCCCA 2280 CCCTGCCAGGATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG 30 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2282 GTGATGTCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC 2283 ATTTAGGCATGCATGCGCTTCTCA TGAGAAGCGCATGCATGCCTAAAT 2284 TTCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCACTAGCGCCGAA 2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAGATGA	•	2274	TGGCTAGGGATGGGGAATCATCTT	AAGATGATTCCCCATCCCTAGCCA
2277 TCCCTACGCGCATGACTCGCTTAC GTAAGCGAGTCATGCGCGTAGGGA 2278 TGGTCGATCACCTGTGACAGACGC GCGTCTGTCACAGGTGATCGACCA 2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGGACTACCCCCA 2280 CCCTGCCAGGATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG 30 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC 2283 ATTTAGGCATGCATGCGCTTCTCA TGAGAAGCGCATGCATGCCTAAAT 2284 TTCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCCACTAGCGCCGAA 2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAGATGA		2275	AGGATTGGGTGCCTGGATGCATTG	CAATGCATCCAGGCACCCAATCCT
TGGTCGATCACCTGTGACAGACGC GCGTCTGTCACAGGTGATCGACCA  2279 TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGACTACCCCCA  2280 CCCTGCCAGGATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG  30 2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA  2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC  2283 ATTTAGGCATGCATGCGCTTCTCA TGAGAAGCGCATGCATGCCTAAAT  2284 TTCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCACTAGCGCCGAA  2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAGATGA	25	2276	TGTATCTACCGGCCTGAAGCAGGT	ACCTGCTTCAGGCCGGTAGATACA
TGGGGGTAGTCCATGCATCAATTG CAATTGATGCATGGACTACCCCCA  2280 CCCTGCCAGGATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG  TCCGGAATAGTAATCCTGGCAGGG  2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA  2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC  2283 ATTTAGGCATGCATGCGCTTCTCA TGAGAAGCGCATGCATGCCTAAAT  TCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCCACTAGCGCCGAA  2284 TTCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCCACTAGCGCCGAA  2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAGATGA		2277	TCCCTACGCGCATGACTCGCTTAC	GTAAGCGAGTCATGCGCGTAGGGA
2280 CCCTGCCAGGATTACTATTCCGGA TCCGGAATAGTAATCCTGGCAGGG  2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA  2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC  2283 ATTTAGGCATGCATGCGCTTCTCA TGAGAAGCGCATGCATGCCTAAAT  2284 TTCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCCACTAGCGCCGAA  2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAGATGA		2278	TGGTCGATCACCTGTGACAGACGC	GCGTCTGTCACAGGTGATCGACCA
2281 TCCCGCACGGGGAATTTAAGTAGA TCTACTTAAATTCCCCGTGCGGGA 2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC 2283 ATTTAGGCATGCGTTCTCA TGAGAAGCGCATGCATGCCTAAAT 2284 TTCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCCACTAGCGCCGAA 2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAGATGA		2279	TGGGGGTAGTCCATGCATCAATTG	CAATTGATGCATGGACTACCCCCA
2282 GTGATGTGCAGGAACTTCTGTCGC GCGACAGAAGTTCCTGCACATCAC 2283 ATTTAGGCATGCATGCGCTTCTCA TGAGAAGCGCATGCATGCCTAAAT 2284 TTCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCCACTAGCGCCGAA 2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAGATGA		2280	CCCTGCCAGGATTACTATTCCGGA	TCCGGAATAGTAATCCTGGCAGGG
2283 ATTTAGGCATGCATGCGCTTCTCA TGAGAAGCGCATGCATGCCTAAAT  2284 TTCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCCACTAGCGCCGAA  2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAAGATGAAGCTC  35 2286 GACAACTCCACTGCTCCAATCGCA TGCGATTGGAGCAGTGGAGTTGTC  2287 GGCCAAGGATGGACCTTACGATGG CCATCGTAAGGTCCATCCTTGGCC  2288 GGTTCCGGAATTTGTCACCGCTTC GAAGCGGTGACAAATTCCGGAACC  2289 GCGCTGGATAGTCTGCGAGAAGCC GGCTTCTCGCAGACTATCCAGCGC  2290 TGAGTCCAGTGCTGCCACCATGAA TTCATGGTGGCAGCACTGGACTCA  40 2291 TTGAATTGGGTGTCGGAGCGTTCT AGAACGCTCCGACACCCAATTCAA	30	2281	TCCCGCACGGGGAATTTAAGTAGA	TCTACTTAAATTCCCCGTGCGGGA
2284 TTCGGCGCTAGTGGACGCCGTCAA TTGACGGCGTCCACTAGCGCCGAA 2285 GAGCTTCATCTCATCAGTTCCGCG CGCGGAACTGATGAGATGA		2282	GTGATGTGCAGGAACTTCTGTCGC	GCGACAGAAGTTCCTGCACATCAC
2285 GAGCTTCATCTCATCAGTTCCGCG CGCGAACTGATGAGATGA		2283	ATTTAGGCATGCATGCGCTTCTCA	TGAGAAGCGCATGCATGCCTAAAT
2286 GACAACTCCACTGCTCCAATCGCA TGCGATTGGAGCAGTGGAGTTGTC 2287 GGCCAAGGATGGACCTTACGATGG CCATCGTAAGGTCCATCCTTGGCC 2288 GGTTCCGGAATTTGTCACCGCTTC GAAGCGGTGACAAATTCCGGAACC 2289 GCGCTGGATAGTCTGCGAGAAGCC GGCTTCTCGCAGACTATCCAGCGC 2290 TGAGTCCAGTGCTGCCACCATGAA TTCATGGTGGCAGCACTGGACTCA 40 2291 TTGAATTGGGTGTCGGAGCGTTCT AGAACGCTCCGACACCCAATTCAA		2284	TTCGGCGCTAGTGGACGCCGTCAA	TTGACGGCGTCCACTAGCGCCGAA
2287 GGCCAAGGATGGACCTTACGATGG CCATCGTAAGGTCCATCCTTGGCC 2288 GGTTCCGGAATTTGTCACCGCTTC GAAGCGGTGACAAATTCCGGAACC 2289 GCGCTGGATAGTCTGCGAGAAGCC GGCTTCTCGCAGACTATCCAGCGC 2290 TGAGTCCAGTGCTGCCACCATGAA TTCATGGTGGCAGCACTGGACTCA 40 2291 TTGAATTGGGTGTCGGAGCGTTCT AGAACGCTCCGACACCCAATTCAA		2285	GAGCTTCATCTCATCAGTTCCGCG	CGCGGAACTGATGAGGTGAAGCTC
2288 GGTTCCGGAATTTGTCACCGCTTC GAAGCGGTGACAAATTCCGGAACC 2289 GCGCTGGATAGTCTGCGAGAAGCC GGCTTCTCGCAGACTATCCAGCGC 2290 TGAGTCCAGTGCTGCCACCATGAA TTCATGGTGGCAGCACTGGACTCA 40 2291 TTGAATTGGGTGTCGGAGCGTTCT AGAACGCTCCGACACCCAATTCAA	35	2286	GACAACTCCACTGCTCCAATCGCA	TGCGATTGGAGCAGTGGAGTTGTC
2289 GCGCTGGATAGTCTGCGAGAAGCC GGCTTCTCGCAGACTATCCAGCGC 2290 TGAGTCCAGTGCTGCCACCATGAA TTCATGGTGGCAGCACTGGACTCA 40 2291 TTGAATTGGGTGTCGGAGCGTTCT AGAACGCTCCGACACCCAATTCAA		2287	GGCCAAGGATGGACCTTACGATGG	CCATCGTAAGGTCCATCCTTGGCC
2290 TGAGTCCAGTGCTGCCACCATGAA TTCATGGTGGCAGCACTGGACTCA 40 2291 TTGAATTGGGTGTCGGAGCGTTCT AGAACGCTCCGACACCCAATTCAA		2288	GGTTCCGGAATTTGTCACCGCTTC	GAAGCGGTGACAAATTCCGGAACC
40 2291 TTGAATTGGGTGTCGGAGCGTTCT AGAACGCTCCGACACCCAATTCAA		2289	GCGCTGGATAGTCTGCGAGAAGCC	GGCTTCTCGCAGACTATCCAGCGC
		2290	TGAGTCCAGTGCTGCCACCATGAA	TTCATGGTGGCAGCACTGGACTCA
2292 CGGCGGCAGACAATGCTTTGAAC GTTCAAAGCATTGTCTGCCCGCCG	40	2291	TTGAATTGGGTGTCGGAGCGTTCT	AGAACGCTCCGACACCCAATTCAA
		2292	CGGCGGCAGACAATGCTTTGAAC	GTTCAAAGCATTGTCTGCCCGCCG

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2293	GGGTCTGTCAAAGAGGGTGTCTGG	CCAGACACCCTCTTTGACAGACCC
2294	CTTTGTGCAAGACGAAGCACCCTT	AAGGGTGCTTCGTCTTGCACAAAG
2295	ATCGAATTCCGAGGAGGTCTCCAT	ATGGAGACCTCCTCGGAATTCGAT
2296	TCCGACCCTCAGAGTCGACTCATT	AATGAGTCGACTCTGAGGGTCGGA
2297	ATCAACGGCCACCTCCTCGCCGAG	CTCGGCGAGGAGGTGGCCGTTGAT
2298	AGCCACGGAATAATTCCGTCCACC	GGTGGACGGAATTATTCCGTGGCT
2299	GATCGCTTGCGTATCGCAAAGACT	AGTCTTTGCGATACGCAAGCGATC
2300	TCCACGCCTTACCATCAACTGCAA	TTGCAGTTGATGGTAAGGCGTGGA
2301	GCCAAGCGATAGGCCAGAACTCAG	CTGAGTTCTGGCCTATCGCTTGGC
2302	AGCGTGTGGGTCATTTTAGCACGA	TCGTGCTAAAATGACCCACACGCT
2303	GTTATGCGCGGCTTACGAGTTCGA	TCGAACTCGTAAGCCGCGCATAAC
2304	TCTGTCCACGTAACTTGCCTGCAG	CTGCAGGCAAGTTACGTGGACAGA
2305	TCGGCAGCCAATGATCATACCTCT	AGAGGTATGATCATTGGCTGCCGA
2306	TAAGCCCGATCCGGTCCTGTGTTT	AAACACAGGACCGGATCGGGCTTA
2307	ACATGGCAGACTAACAGGCCTCGC	GCGAGGCCTGTTAGTCTGCCATGT
2308	CATGGCTGCACTCTAAGTCGAACG	CGTTCGACTTAGAGTGCAGCCATG
2309	TCTTCAACCCACGCGGAACGATTG	CAATCGTTCCGCGTGGGTTGAAGA
2310	CTCGTGTCTCCAGAGGATTGTCCC	GGGACAATCCTCTGGAGACACGAG
2311	TGAAGGCATCAACCCAGAGGATTT	AAATCCTCTGGGTTGATGCCTTCA
2312	ACAGCTCGAAGGCAGCCACATTGG	CCAATGTGGCTGCCTTCGAGCTGT
2313	ACAACGAGTACCGCGACAGAAGGG	CCCTTCTGTCGCGGTACTCGTTGT
2314	ATAACCGAAAAACCAGCCTGCGAT	ATCGCAGGCTGGTTTTTCGGTTAT
2315	ACAACTCAGCACTTTCGACGTCCA	TGGACGTCGAAAGTGCTGAGTTGT
2316	CGGGTTACTGGGTATCACCAATGC	GCATTGGTGATACCCAGTAACCCG
2317	CATCGGTTATCGCTGCACGCGCGT	ACGCGCGTGCAGCGATAACCGATG
2318	GAAGGAATCCCGGATAGTCCGTGG	CCACGGACTATCCGGGATTCCTTC
2319	GCATGGTCTCAGCCAAAGAACCTG	CAGGTTCTTTGGCTGAGACCATGC
2320	AGCCTGCGACGTTTCCCGACAGAC	GTCTGTCGGGAAACGTCGCAGGCT
2321	AAGAAAGGCGCACGGGATCGATAT	ATATCGATCCCGTGCGCCTTTCTT
2322	TGTCGCGAAGCCAACTTTCAGTAA	TTACTGAAAGTTGGCTTCGCGACA
2323	GCGGCATGCAAGGTAGGTCTGGAT	ATCCAGACCTACCTTGCATGCCGC
2324	GGTGGCCATCTCCTCGAATTGCAT	ATGCAATTCGAGGAGATGGCCACC
2325	GCGTGCATAAGTTGCACATTGTGC	GCACAATGTGCAACTTATGCACGC
2326	TTGAGGTAGCGTTTTCGCGCATAT	ATATGCGCGAAAACGCTACCTCAA
2327	ATCCCACTTGTGAGAGGGCGCATT	AATGCGCCCTCTCACAAGTGGGAT
2328	CGGTCAGCGAGCAGACATCAACCT	AGGTTGATGTCTGCTCGCTGACCG
2329	GCGTATCTTCGGGTCGAACACTTG	CAAGTGTTCGACCCGAAGATACGC
2330	ATGCCATTGAACTCGCACTTTGCG	CGCAAAGTGCGAGTTCAATGGCAT
2331	CGATTCCCATCATAATGTGGGTCC	GGACCCACATTATGATGGGAATCG
2332	CAATTTGGATAATCCAGCCACGCC	GGCGTGGCTGGATTATCCAAATTG
2333	CGGCTTACCCTATGATTCCGTGCA	TGCACGGAATCATAGGGTAAGCCG

•	2334	GGTGGACCATGCGCTGTGGTATGA	TCATACCACAGCGCATGGTCCACC
	2335	TATTTGTCGAAGATCGCAAGCGCC	GGCGCTTGCGATCTTCGACAAATA
	2336	GTCAGTGGGTTTTGAGAGCCCGCA	TGCGGGCTCTCAAAACCCACTGAC
	2337	AGGGGTCGGGAAATCTGACAAAA	TTTTGTCAGATTTCCCGACCCCCT
5	2338	TGCTTGCTATCCGAAAAAAGCAGG	CCTGCTTTTTTCGGATAGCAAGCA
	2339	TTATCGGATCAAATTCGGCTTCGG	CCGAAGCCGAATTTGATCCGATAA
	2340	TGCAGCAACGAGTTACCCGGACTT	AAGTCCGGGTAACTCGTTGCTGCA
	2341	TATACATGTCCGGAGGGGCACCCA	TGGGTGCCCCTCCGGACATGTATA
	2342	TGCAAAACCGGAGGATGAACCCTT	AAGGGTTCATCCTCCGGTTTTGCA
10	2343	TCGGTCTAATGTCCACGCAGACAC	GTGTCTGCGTGGACATTAGACCGA
	2344	ATGTGTTTGCCACGCGCTCCTATT	AATAGGAGCGCGTGGCAAACACAT
	2345	TGGCGAGGCACGGCTCTAATTCGG	CCGAATTAGAGCCGTGCCTCGCCA
	2346	GCGACGACCGAGCGACTTTACA	TGTAAAAGTCGCTCGGGTCGTCGC
	2347	CTCAGAGAGTCTATCCGGCGCCCT	AGGGCGCCGGATAGACTCTCTGAG
15	2348	GGAACATCTCCTGGGTCCCTCAGA	TCTGAGGGACCCAGGAGATGTTCC
	2349	GCAACGCAGGGAAGTACTTAGCGA	TCGCTAAGTACTTCCCTGCGTTGC
	2350	TGACTTGGGCGGACAAAGAAACGC	GCGTTTCTTTGTCCGCCCAAGTCA
	2351	AGATCATCGGGACGCTTCATGCTA	TAGCATGAAGCGTCCCGATGATCT
	2352	CCCTTCTGACCGCTAAGGCCATAA	TTATGGCCTTAGCGGTCAGAAGGG
20	2353	CGTGAGCCGTGGGGTGTCTCTGTA	TACAGAGACACCCCACGGCTCACG
	2354	TACCTTGGTCGTCTCCGCTTTTGT	ACAAAAGCGGAGACGACCAAGGTA
	2355	TCGCCGCAAAATGCTACGTGAAAA	TTTTCACGTAGCATTTTGCGGCGA
	2356	GAGTGACCTAATGGCTGCCCGACT	AGTCGGGCAGCCATTAGGTCACTC
	2357	AAAGGAACTTGGCCAACCCTATGG	CCATAGGGTTGGCCAAGTTCCTTT
25	2358	TGTTTTCGCACTCCACCTAATCGC	GCGATTAGGTGGAGTGCGAAAACA
	2359	CAATGGGTTTCATAAGGGCAGGCA	TGCCTGCCCTTATGAAACCCATTG
	2360	GCCTAACACACAGGGTCCCTCTG	CAGAGGGACCCTTGTGTGTTAGGC
	2361	CGTCATGCGGTCCGAGGATCGATC	GATCGATCCTCGGACCGCATGACG
	2362	CCACACGGGCACGGAGTAATATCT	AGATATTACTCCGTGCCCGTGTGG
30	2363	CATCAGACATAGGTCGCGTGCCGA	TCGGCACGCGACCTATGTCTGATG
	2364	AGATGAAACCAAGGGAGGACGCAG	CTGCGTCCTCCCTTGGTTTCATCT
	2365	GGCTACCCATAGGCTCAGCAGCAC	GTGCTGCTGAGCCTATGGGTAGCC
	2366	GGCTTGTGAGGGTGTGTTCTCGAC	GTCGAGAACACACCCTCACAAGCC
	2367	TGTGTTACGGCGAATGCAACAGTC	GACTGTTGCATTCGCCGTAACACA
35	2368	CGATAACAGGTCGCGCCGTTACTA	TAGTAACGGCGCGACCTGTTATCG
	2369	TGATAAAGTGAGGCTCCAGCGCGA	TCGCGCTGGAGCCTCACTTTATCA
	2370	AATTGTGCACGGATCTGCACGGCG	CGCCGTGCAGATCCGTGCACAATT
	2371	GCAATGTACTGTCACCAGTGGCGA	TCGCCACTGGTGACAGTACATTGC
	2372	GGCATATCGGTAACACTTGGTCGG	CCGACCAAGTGTTACCGATATGCC
40	2373	GGGTCTCAAACCAGCGTGGCCGCT	AGCGGCCACGCTGGTTTGAGACCC
	2374	GTCTCCGGGACCATTGAGCTGGAG	CTCCAGCTCAATGGTCCCGGAGAC

	2375	GGCCTTCGGCATTCAGACGGGTTG	CAACCCGTCTGAATGCCGAAGGCC
	2376	CGTGATAGGCCACAGCGCTCAATT	AATTGAGCGCTGTGGCCTATCACG
	2377	GGCAGGCCCGCGAGGATGATTAAC	GTTAATCATCCTCGCGGGCCTGCC
	2378	CGGGTATGGTTGATAACAGCGTGG	CCACGCTGTTATCAACCATACCCG
5	2379	ACGACGTCCTTGGGACCGTATTGT	ACAATACGGTCCCAAGGACGTCGT
	2380	CTGATATCGAGCCTGAGCCTTTCG	CGAAAGGCTCAGGCTCGATATCAG
	2381	TCCCATTGGCCTGTATGCTGGCCT	AGGCCAGCATACAGGCCAATGGGA
	2382	GTGTCGTCGATTGTTTCATCGACG	CGTCGATGAAACAATCGACGACAC
	2383	CGAAAGCCAGTAGCCGATTGCGTG	CACGCAATCGGCTACTGGCTTTCG
10	2384	GGTTCGGCTTATTCCACTGCGACA	TGTCGCAGTGGAATAAGCCGAACC
	2385	AGCGAGGGCTAACTTTTTAACGCG	CGCGTTAAAAAGTTAGCCCTCGCT
	2386	CGGCGCTGATGACGGGACTCGATT	AATCGAGTCCCGTCATCAGCGCCG
	2387	TCACAGTGCTCGGCGTAAGGACTA	TAGTCCTTACGCCGAGCACTGTGA
	2388	CCCATTACGAGCACACACCATGGC	GCCATGGTGTGTGCTCGTAATGGG
15	2389	GGCCGCTAATCTTTACGCATCACG	CGTGATGCGTAAAGATTAGCGGCC
	2390	ACGGCTTCCTAGTGTCCAGCCCTT	AAGGGCTGGACACTAGGAAGCCGT
	2391	CTGTCAGGTCCTACCCAATGGCTC	GAGCCATTGGGTAGGACCTGACAG
	2392	CACAGCCCATCCCACTGAACTGCT	AGCAGTTCAGTGGGATGGGCTGTG
	2393	ACAAACGATACACGCAACGCTGTG	CACAGCGTTGCGTGTATCGTTTGT
20	2394	TGGCGGCCAGCTAGCAGGCGAAGT	ACTTCGCCTGCTAGCTGGCCGCCA
	2395	ATCTCGAAACGATGCGTGCCTAAA	TTTAGGCACGCATCGTTTCGAGAT
	2396	ATCTCGAGAACAGCGTGCGTGCGG	CCGCACGCACGCTGTTCTCGAGAT
	2397	GAAGAAATCCGCCGACATCTACGG	CCGTAGATGTCGGCGGATTTCTTC
	2398	GCGGAGCAACCTTGGCTGTTTCTA	TAGAAACAGCCAAGGTTGCTCCGC
25	2399	CGCGTTCCGAAGACTTGTTGTTTG	CAAACAACAAGTCTTCGGAACGCG
	2400	TGACCTGAAGCCCATCCATAAGCA	TGCTTATGGATGGGCTTCAGGTCA
	2401	TGGTATTCATTCCGGATAAGCGGG	CCCGCTTATCCGGAATGAATACCA
	2402	GCGTTGCGGGTCATTGATGCAAAC	GTTTGCATCAATGACCCGCAACGC
	2403	ACCGCTTTCTGTGTAGAGCCCTGA	TCAGGGCTCTACACAGAAAGCGGT
30	2404	CAAATAGACAATCGCAGCTTCGGG	CCCGAAGCTGCGATTGTCTATTTG
	2405	TGTCCTGACAAATCAAGGTGCAGG	CCTGCACCTTGATTTGTCAGGACA
	2406	AAATTGCACTCGCGGAGATTTCCT	AGGAAATCTCCGCGAGTGCAATTT
	2407	TGACGCCCATTTCTATATGGTGCA	TGCACCATATAGAAATGGGCGTCA
	2408	TGTTCCGACAGGGCACTGCTAGAC	GTCTAGCAGTGCCCTGTCGGAACA
35	2409	TCGCTGGCTTGGGAAGGCCTTCGT	ACGAAGGCCTTCCCAAGCCAGCGA
	2410	GTGCACCTCCGTTGGCGTAGAATG	CATTCTACGCCAACGGAGGTGCAC
	2411	CTCATTTGGGACCGATCGGGTTGC	GCAACCCGATCGGTCCCAAATGAG
	2412	GCCAGTGTCTGTCAATGGATGGGA	TCCCATCCATTGACAGACACTGGC
	2413	TTGCCCGGCAGGTTCTGTGTAATG	CATTACACAGAACCTGCCGGGCAA
40	2414	ACCCGCGAACCGAGACGCACTTCT	AGAAGTGCGTCTCGGTTCGCGGGT
	2415	TCCGTGCGATTGGTCAAGGTTGAT	ATCAACCTTGACCAATCGCACGGA

2416 AGGGCGTCTGGGTTGAACCTCGGT ACCGAGGTTCAACCGAGACGCCCT 2417 TGACCGTTCAAGAGCAAC GTTGGCTTGCTCTTTTGAACGGTCA 2418 ACACTCACCTGCTGTCCTGCTGA TCAGCAGGACAGCAGGTGATGT 2419 GCGTTTAACTCCTTGGGTGGTGGT ACCACCCACCGAGGATAAACGC 2420 CGCCTGCGCAGGTAACTCTCCGCA TGCGGAGGTTAACGC 2421 AATCGAATTTCCCAGCGGCTGTTT ACCCCCAGGAGATTACCTCCTTT 2422 AAGCAGGTGGATCA TGATCCCCAGGAGATTCCATCTT 2423 AATCCCAGACTCGTGGGATCA TGATCCCCAGGAGTCCCACCTCTT 2424 ACGGTTATAAGGGCCGGCTGCAAC TGATCCCAGCAGCAGATCCCACCTCTT 2425 TACGAGAGGCGGGTTGAACTCTCCGC GCACCGGCCCTTATAACCGT 2426 GCGATTTAAACGGCCGCTTGCGC GCACCGCCCGCCCTTCCGTA 2427 AGCTGTATAATTGGATGCCGC GCACCGTCCAAATTAACCGT 2428 TCCGCGAGTCTAAGCCCACGGTTAAGCCCCACTGCTAAACCACTCGCT 2429 GGCATTCAACCCACGGTTAACC 2429 GGCATCAACTCCGCGTTAAGCCCACAGTAACCATCGCAAATTAATCACCT 2429 GGCATCAACTCCGCGATTGAAC 2429 GGCATCACCTCCGTAAGCCGATAA GTTCAATCAGGCTCAAAATAGCACTCGCAAAAAACACTCCCACACCAAAAAAACACCCAAAAAAAA				<del></del>
2418 ACACTCACCTGCTGCCTGCA TCAGCAGGGACAGCAGGTGAGTGT 2419 GCGTTTACTCCTTGGGTGGTGTGGT ACCACCCACAGGAGTTAAACGC 2420 CGCCTGCGCAGGTAACTCTCCGCA TGCGAGAGATTACACGC 2421 AATCGAATTTCCAGGCGGTGTTT AAACAGCCGCTGGGAAATTCGATT 2422 AAGCAGGTGGATCCTGGGGATCA TGATCCCCAGGAGTTCCACCTGCTT 2423 AATCCCAGACTCGCTCTTCGTGGT AAACAGCCGCTGGGAAATTCGATT 2424 ACGGTTATAAGGGCCGGTGGCAC TGCGCAGGAGGAGTCCCACCTGCTT 2425 TACGAGAGCGGCTGTGACCTTCGTGCT AGCACGAGAGAGCGAGTCCCACCTGCTT 2426 GCGATTTTGACCGCACGGTTGCGAC GCGACGCCGGCCCTTAAACCGT 2427 AGCTGTATAATTTGGATGGCGCAC TCCAATAACGCCGCTCCTCGTA 2428 TCCGCGAGTCTAACCGCACGGTACACCATCAAATTATACAGCT 2429 GGCATCAGCTCCGTAAGCCGATAG CTACCACCACGCACAAATTGCACCCACGGACCACAAATTGCACCACGGTAAGACACACAC		2416	AGGGCGTCTCGGTTGAACCTCGGT	ACCGAGGTTCAACCGAGACGCCCT
2419 GCGTTTAACTCCTTGGGTGGTGGT 2420 CGCCTGCGGGGTACTCTCCGCA 2421 AATCGAATTTCCCAGCGGTGTTT 2422 AAGCAGGTGGGATCCTCCGCA 2421 AATCGAATTTCCCAGCGGGTGTTT 2422 AAGCAGGTGGGATCCTGGGGATCA 2423 AATCCCAGACTCGCTCTTCGTGCT 2423 AATCCCAGACTCGCTCTTCGTGCT 2424 ACGGTTATAAGGGCCGGCTGCGAC 2425 TACGAGACGGGGCTTAGACGTCGC 2426 GCGATTTTAACCGT 2427 AGCTGTATAAGGGCCGGCTTGCGAC 2428 GCGATTTTGACCCACGGTTATCGA 2428 TCCGCGAGCGGCTCCGAC 2428 TCCGCGAGCCGGCTCCGAC 2428 TCCGCGAGCCGGCTCCGAC 2429 GGCATTATACCGAT 2429 GGCATCTAGCCCACGGTTATCGA 2429 GGCATCAGCTTAGCCGATTGAAC 2429 GGCATCAGCCCGTTTGACCGTCCAAATATAACAGCT 2421 TGTTATTGGCAGTTCGACGATAGACTCCGAAATATACAGCT 2421 GCGAGCCTTTTGCCCGATAGAC 2422 GGCATCAGCTCCGTAAGCCGATAG 2423 TGTTATTGGCAGTTCGACGAACA 2431 GCGAGCCTTTTTGCTTGGGAAGAC 2432 CGGAGCCTTTTTGCTTGGGAAGAC 2433 CGGGTCGACCCTTGAACACTTCCCAAGCAAAAAGGCTCGC 2434 CTCGGTTTTGCTTGGGAAGAC 2435 GCAGTCCTATCCGGAGCCGACAA 2436 CTCGGTTTTCCAAAACTTACCGCG 2437 AGTGGAACCATAACC 2438 AAGGTGCGCCTGACAA 2438 TACAGGCCTATTTTGTTGTCGGC 2438 AAGGTGCGCCTGACAA 2439 CCGCAAAACATTACCGCG 2438 TACAGGCCTATTTTGTTGTCGGT 2439 CCGAAATCCATGCCGACACCTGA 2439 CCGCAAAACAATACCGCGC 2431 GGAGCCTATTTCTGCGAGGGA 2432 CCGAAGTCCAACACACCTGA 2433 TACAGGCCTATTTCTGCGAGGGA 2434 CTCGGTTTCCCAAGCACACA 2434 CTCGGTTTCCGAGCACACCTGA 2435 GCAGTCCTATCCGGAGCCTGACACA 2436 CCGCAAACAAATAGCGCCCCC 2437 AAGGTCGCACACCTGA 2438 TACAGGCCTATTTCTGCGAGGGA 2439 CCGAAATCCATGCCGACACCTGA 2439 CCGAAATCCATGCCGACACCTGA 2439 CCGAAATCCATGCCGACACCTGA 2431 CGGACCCCCAACCTCATAGTTGC 2432 CCGAAGTGCGAACACACCTGATAGCACCACGCCATCCACTGTACCACTTCCCACGGACACCACTTCCACCACCACCTCATCACACC 2434 CTCCGCCCAACCACCTCATAGTTGC 2434 CTCCGCCCAACCCTCATAGTTGC 2434 CTCCGCCCAACCACCTCATAGTTGC 2434 CTCCGCCCAACCCTCAATCACAC 2434 CTCCGCCCAACCCTCAATCACAC 2434 CTCCGCCAACCCTCAATCACAC 36GATTCCCGGGTTGCCCTGTAACCAC 36GACCCTCCCATGCACCCCCACCCTCATCCACCCTGTTCCCCACTGCACACCCTTTCCCACTTCCCACCTTCCACCACCCCACCCCTCACCCTTTCCCACCA		2417	TGACCGTTCAAAGAGCAAGCCAAC	GTTGGCTTGCTCTTTGAACGGTCA
5 2420 CGCCTGCGCAGGTAACTCTCCGCA 2421 AATCGAATITCCCAGCGGCTGTTT 2422 AAGCAGGTGGGATCA TGATCCCCAGGATCCCACCTGTT 2422 AAGCAGGTGGGATCCTGGGGATCA 2423 AATCCCAGACTCGCTCTTCGTGCT AGCACGAGAGAGCCGACTGGGATT 2424 ACGGTTATAAGGGCCGGCTGCGAC GTGCGAGAGAGCCGAGTCCCACCTGCTT 2425 TACGAGAGCGGGCTTAGACGTCGC GCGACGGGCCCTTATAACCGT 2426 GCGATTTTGACCCACGGTTATCGA TCGATAACCGTGGGTATAACACGTCGCCAATTAATATTTGATGCCCACGGTTATCGA 2427 AGCTGTAAATTTTGGATGGCGCCA TCGCACAATTAAACACCT 2428 TCCGCGAGTCTAAGCCGATTGAAC GTTCAACCGTGGGTCAAAATCGC 2429 TCCGCGAGTCTAAGCCGATTGAAC GTTCAATCGGCTAAGACTCGCGGA 2429 GGCATCACCTCCGTAAGCCGATTGAAC GTTCAATCGGCTAAGACTCGCGGA 2429 GGCATCACCTCCGTAAGCCGATAG CTATCGGCTAAGACTCGCGGA 2421 GCGAGCCTTTTGCTTGGGAAGA CTCTTCCCAAGCAATAACAC 2431 GCGAGCCTTTTGCTTGGGAAGA CTCTTCCCAAGCAAAAAGGCTCGC 2432 AGAAGAAAAGGTCAGCGTCGACAG TCGTCGAACTGCCAATAACA 2431 GCGAGCCTTTTACTGTTGGGAAGA TCGTCGAACTGCCAATAACA 2431 GCGAGCCTTTTACTGTTGGGAAGA TCGTCGAACGACACACAAAAAGGCTCGC 2432 AGAAGAAAAGTTACCGCG CGCGGTAAGTTTGTAAAACCCGAC 2433 CTCGGTTTTCACAAACTTACCGCG CGCGGTAAGTTTGAAACCCGAC 2434 CTCGGTTTTCACAAACTTACCGCG CGCGGTAAGTTTGAAAACCCGAC 2435 GCAGTCCTATCCGGAGCCTGACAA TTGTCAGGCTCGACCTCT 2437 AGTGGAATCCATGCCGACACCTGA TCACGGTCCAGCATGACCTT 2438 TACAGGCGTAATTTGTTCGGTC GACCGACAACAAATAGCGCACCTT 2439 AGTGGAATCCATGCCGACACCTTGA TCCCTCGCAGGAATTACGCCTGTA 2439 TACAGGCGTAATTCCTGCGAGGAA TCCCTCGCAGGAATTACGCCTGTA 2439 TACAGGCGTAATTCCTGCGAGGAA TCCCTCGCAGGAATTACGCCTTCGG 2440 AAGGACTGGTATGGCCGACACCTTA 2431 GGAAACCCGCAACCACATTAGTTCC 2441 GGACACCGCCAACCTCATAGTTCC 2442 AATGGTTTCCGCCGAGAACACAATTAGAGTTTCCTCCACCTTCCGCACACACA		2418	ACACTCACCTGCTGTCCCTGCTGA	TCAGCAGGACAGCAGGTGAGTGT
2421 AATCGAATTTCCCAGCGGCTGTTT 2422 AAGCAGGTGGGATCA 2423 AATCCCAGACTCGCTCTTCGTGCT 2424 AACGGTTATAAGGCCGGCTGCTCTTCGTGCT 2424 ACGGTTATAAGGGCCGGCTGCGAC 2425 TACGAGAGCGGGCGGCTGCGAC 2426 GCGATTTTAGACCGACGGTCTTAGACCCGGCCCTTATAACCCGTGTAGACCTCTCGTA 2427 AGCTGTATAATTTGGATGGCCGCGCCTTATAGCCGCTCTCGTA 2428 TCCGCGAGCTCTAGACCGTTATCGA 2429 GCGATTTAGCCCACGGTTATCGA 2429 TCCGCGAGCTCCGTAGACCGATTAGACCCTGAGACTCGCGGA 2429 GGCATCAGCTCCGTAAGCCGATAG 2430 TGTTATTGGCAGTTCGACCGATTGAAC 2431 GCGAGCTTTTGCCGATTGAAC 2432 AGAAGAAAAGGTCAGCGAATAG 2433 CGGGCCTTTTTGCTGTAGAC 2434 GCGAGCCTTTTTGCTGAAACCTCCCAATAACACT 2435 GCAGCCTTTTTGCTGGAAGAC 2436 CTCGGTTAGACCGTAGAC 2437 AGAAGAAAAGGTCAGCGCGCACACACACAAATAGCGCCGCACACAAACACAAAACTTCCGCGGA 2438 AAGGTCGACCCTTGAAGCATAACC 2438 AAGGTCAGCCTTGAAGCATAACC 2439 GCAGTCCTATCCGGAGCCTGACCAA 2431 CTCGGTTTTCCAAAACTTACCGCG 2432 AGAAGAAAAAGTCAGCGCTCGACCAA 2433 CAGGTCGACCCTTGAAGCATAACC 2434 CTCGGTTTTCCAAAACTTACCGCG 2435 GCAGTCCTATCCGGAGCCTGAACAA 1TGTCAGGCTTCCAGACAAAAAACTAGCGACCCCG 2436 AAGGTGCGCAAAACTTACCGCG 2437 AGTGGAAATTCCTGCGAGCCTGAACAAAAAAAAAAAAACCGACAAAAAAAA		2419	GCGTTTAACTCCTTGGGTGGTGGT	ACCACCACCAAGGAGTTAAACGC
2422 AAGCAGGTGGGATCCTGGGGATCA 2423 AATCCCAGACTCGCTCTTCGTGCT 2424 ACGGTTATAAGGGCCGGCTGCGAC 2425 TACGAGAGCGGGCTGCGAC CTCGCAGCCCGGCCCTTATAACCGT 2426 GCGATTTTGGACCCACGGTTATCGACCCTCGTA 2426 GCGATTTGGACCCACGGTTATCGA 2427 AGCTGTATAATTTGGATGGCGCGA 2428 TCCGCGAGTCTTAGCCGATTGACC 2428 TCCGCGAGTCTTAGCCGATTGACC 2429 GGCATCTAAGCTCGTAGCCGATTGACC 2429 GGCATCTAGCCGATTGAAC 2421 GCGACGTCTTAGCCGATTGACC 2422 AGCGTTATTAGCCGATTGAAC 2423 TGTTATTGGCAGTTCGAGCCGATAG 2424 AGCAGCCTTTTTGCTTGGGAAGAG 2430 TGTTATTGGCAGTTCGAGCCGATAG 2431 GCGAGCCTTTTTGCTTGGGAAGAG 2432 AGAAGAAAGGTCAGCGTCGAAGAC 2433 CGGGTCGACCCTTGAAGCCGATAG 2434 CTCGGTTTTCCTTGGGAAGAG 2434 CTCGGTTTTCCCAAGCACAACCCGATAGCCCAATAACCA 2435 GCAGCCCTTGAAGCCACAA 2436 AAGGTCCGACAACAACTTACCGCG CGCGGTAAGTTTTGTTCTTCT 2437 AGAGGAACACCTTTTGTTCTGGTC 2438 TACAGGCCTAATTTTTTTCCGGACCCACACAACAAATAGCCCACCT 2439 AAGGTCCGCTAACACCTTGAACCAACAACAACCCCTT 2439 CCGAAGTCCACCCTGACAA TTGTCAGGCTCCGACACACAACAACCCCTT 2439 TACAGGCCTATTTTTTTCTGCTGC 2439 TACAGGCGTAATTCCTGCGAGGAA 2439 CCGAAGTCCACCCTGAACCTTAACCCGC 2439 CCGAAGTCCGACACCCTAACACCTTCAAGCACCTTCCGCACCCTTCCGCAACCACAACAACAACCCCTTTCCCCACCCCCCCC	5	2420	CGCCTGCGCAGGTAACTCTCCGCA	TGCGGAGAGTTACCTGCGCAGGCG
2423 AATCCCAGACTCGCTCTTCGTGCT 2424 ACGGTTATAAGGGCCGGCTGCGAC 3425 TACGAGAGCGGCCTGCGAC 3426 GCGACTTTTAACCGT 3426 GCGATTTTGACCCACGGTTATCGA 3427 AGCTGTATAATTTGGATGGCCGC 3427 AGCTGTATAATTTGGATGGCCGC 3427 AGCTGTATAATTTGGATGGCCGCA 3428 TCCGCGCATCTAAGCCCCACGTTTAACCGT 3429 GCGATCTTAGCCACGTTTAACC 3429 GGCATCCAGCTCTGAACCCCACGTTCAACCCTCGGAACTCCCAAATTATACAGCT 3430 TGTTATTGGATGCCGATAG 3431 GCGAGCCTTTTTGCTTGGAACG 3432 AGAAGAAAAGGTCAGCGTCGACGA 3432 AGAAGAAAAGGTCAGCGTCGACGA 3433 CCGGTCGACCCTTGAAGCCTCCGAACTCCAAATAACA 3431 GCGAGCCTTTTTGCTTGGGAAGAG 3432 AGAAGAAAAGGTCAGCGTCGACGA 3433 CCGGGTCGACCCTTGAAGCATAACC 3433 CGGGTCGACCCTTGAAGCATAACC 3434 CTCGGTTTTCACAAGCTTACCGCG 3435 GCAGTCCTATCCGGAGCCTCAAA 3436 AAGGTGCGCTCAAAACTTACCGCG 3437 AGTGGAATCCATCGCGACACCTGA 3438 AAGGTGCGCTATTGTTGTCGGTC 3438 AAGGTGCGACACCTGA 3439 CCGAAGTACCACGGACACCTGA 3439 CCGAAGTCGCAGAACCTGA 3439 CCGAAGTGCGAAACCTGA 3439 CCGAAGTGCGAAACCTGA 3440 AAGGACTGGTATGGCCGAACCTTT 3441 GGACACCGCCAACCCTGATACCC 3442 AATGGTTCGCCGACACCTTAATTCC 3444 TCTCACCCCAATGATCCGC 3444 TCTCACCCCAACCTCAATATTCC 3444 TCTCACCCCAATCCTCAACCTTCCCCAACCAACCAATTCCACTCTTC 3445 CGTGTTTCGCCTGGAACTCCC 3446 TCCAGCGCAACCTCATACTTCC 3447 TCTCACCCCAATCATGTTGC 3448 TCCAGCGCAACCTCATACTTCC 3448 ATCTCCCTGGACACTCAACCTCATCCACCCACCCTTCCCCACACCCTTCCCCACACCCTTCCCCACACCCTTCCCCACACCCTTCCCCACACCCTTCCCCACACCCTTCCCCACACCCCTTCCCCACACCCCTTCCCCACACCCCTTCCCCACACCCCTTCCCCACACCCCTTCCCCACACCCCACCCCACCCCCACCCCACCCCCACCCCCACCCC		2421	AATCGAATTTCCCAGCGGCTGTTT	AAACAGCCGCTGGGAAATTCGATT
2424 ACGGTTATAAGGGCCGGCTGCGAC  2425 TACGAGAGCGGGCTTAGACGTCGC  2426 GCGATTITGACCCACGGTTATCGA  2427 AGCTGTATAATTTGGATTCGA  2428 TCCGCGAGTTTAGACCGCGCA  2428 TCCGCGAGTCTAGCCGCGATTCGACTCCAAAATCGCC  2428 TCCGCGAGTCTTAGCCGATTGAAC  2428 TCCGCGAGTCTTAGCCGATTGAAC  2428 TCCGCGAGTCTTAGCCGATTGAAC  2428 TCCGCGAGTCTTAGCCGATTGAAC  2429 GGCATCAGCTCCGTAAGCCGATAG  2429 GGCATCAGCTCCGTAAGCCGATAG  2430 TGTTATTGGCAGTTCGAGCGACAG  2431 GCGAGCCTTTTTGCTTGGGAAGAG  2432 AGAAGAAAAGGTCAGCGTCGACGA  2432 CGGGTCGACCCTTGAAGCCATAACC  2433 CGGGTCGACCCTTGAAGCATAACC  2434 CTCGGTTTCCAGACCATAACC  2434 CTCGGTTTCACAAACTTACCGCG  2435 GCAGTCCTTTCCGGAGCCTGACAA  1TGTCAGCCGGATAGAACCTTCAGGCC  2436 AAGGTGCGCTTACCGGAGCCTGACAA  1TGTCAGCCGGATAGACCCTT  2437 AGTGGAATCCATCCGGACCCTGA  2438 TACAGGCGTAATTCTTGCGTC  2439 CCGAAGTGCAGAACACACTAAC  2439 CCGAAGTGCGAAACACATTACCGGC  2440 AAGGACTGGTATGGCGGAGCATTT  2441 GGACACCGCCAACCTTGATTGC  2442 AATGGTTTCGCAGAACCTTGATTGC  2444 GGACCACCGCCAACCTTGATTGC  2444 GGACACCGCCAACCTTTTTCTTCGCACTTCCGAGACTTTCCGCACTTCCGCAGACACAATACCACTTCCGCACCCTTTCCGCACTTCCGCACCCTTTCCGCACTTCCGCACCCTTTCCGCACTTCCGCACCCTTTCCGCACTTCCGCACCCATACCACTCTTTCCCACTTCCGCACCCACC		2422	AAGCAGGTGGGATCCTGGGGATCA	TGATCCCAGGATCCCACCTGCTT
10 2425 TACGAGAGCGGGCTTAGACGTCGC GCGACGTCTAGCCCGCTCTCGTA 2428 GCGATTTTGACCCACGGTTATCGA TCGATAACCGTGGGTCAAAATCGC 2427 AGCTGTATAATTTGGATGGCGCGA 2428 TCCGCGAGTCTTAGCCGATTGAAC GTCAATCAGCTCGCGGA 2429 GGCATCAGCTCCGTAAGCCGATTGAC CTATCGGCTTAGGCGCGAT 2429 GGCATCAGCTCCGTAAGCCGATAG CTATCGGCTTAGGACCTGATGCC 2430 TGTTATTGGCAGTCGACAG CTGTCGACTGCAACACACACACACACACACACACACACAC		2423	AATCCCAGACTCGCTCTTCGTGCT	AGCACGAAGAGCGAGTCTGGGATT
2426 GCGATTITGACCCACGGTTATCGA 2427 AGCTGTATAATTTGGATGGCGCGA 2428 TCCGCGGGTCTAAGCCGATTGAAC 2428 TCCGCGGGTCTTAGCCGATTGAAC 2429 GCATCAGCTCCGTAGGCCGATTGAC 2429 GCATCAGCTCCGTAGGCCGATTGAC 2430 TGTTATTGGCAGTTCGAGCGGACG 2431 GCGAGCCTTTTGCTTGGGAAGAG 2431 GCGAGCCTTTTGCTTGGGAAGAG 2432 AGAAGAAAAGGTCAGCGACGA 2433 CGGGTCGACCCTTGAAGC TCGTCCAAACACACCCG 2434 CTCGGTTTTCATCGGACGACG 2434 CTCGGTTTTCAAACCTTACCGG 2435 GCAGTCCTATCCGAGCACAA 2436 AAGGTGCGCTCGACGA TTGTCGAGCGTCGACCCC 2437 AGTGGACCCTTGAAGCATAACC 2438 AAGGTGCGCTATTCCGGAGCCTGACAA 2439 AAGGTGCGCTATTTGTTGCGGT 2437 AGTGGAATCCATCCGGAGCCTGACAA 2438 TACAGGCGTAATTCCTGCGAGCACTGA 2439 CCGAAATCCATGCCGACACCTGA TCACTCGCAGCAATGACCCTGT 2437 AGTGGAATCCATGCCGACACCTGA TCACTCGCAGGAATTACGCCTGTA 2439 CCGAAAGCAGAACAAATTACCGCG GACCGACACACAAATACCGCACCTTT 2439 CCGAAGTGCGAAACCCTGA TCACTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAAACCACTTA AACAACCTGCTTCTCGCACTTCGG 2440 AAGGACTGGTATTCCTGCGAGGGA TCCCTCGCAGGAATTACCCTGTA 2439 CCGAAGTGCGAAACCACTTA AAACCTCCTGCACTTCGG 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGCCGTTCCTGCACTTCGG 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTATCCACGTCCTT 2443 TAGGAAAGCGTACCACG GAACCACTCATACCAGTCCTT 2443 TAGGAAAGCGTACCACGGGAATCC 2444 TCTCACCCCAATGATGAGGACGC CGGATTCCCCTGTACCACTTCCTA 2444 TCTCACCCCAATGATGAGGACGC CACCTCATCATTCCGCTGACCTTTCTA 2444 TCTCACCCCAATGATGAGACGTC CATGGACAGTGTACCACTGGAACACACCTTCCACCCTGAACACACCTTTCCTA 2444 TCTCACCCCAATGATGAGACGTAC 2446 TCCAGGCTGTTGCGGATACCACT CATGGACAGTGTCACACGGACACC 2446 TCCAGGCTGTTGCGGATACCATACCATTCCGCAACACCCTTCCTACCTCTCACCACCACCCCTCCAACACCCTTCCTCACCAC		2424	ACGGTTATAAGGGCCGGCTGCGAC	GTCGCAGCCGGCCCTTATAACCGT
2427 AGCTGTATAATTTGGATGGCGGA TCGCGCATCCAAATTATACAGCT 2428 TCCGCGAGTCTTAGCCGATTGAAC GTTCAATCGGCTAAGACTCGCGGA 2429 GGCATCAGCTCCGTAAGCCGATAG CTATCGGCTTACGAGCTGATGCC 2430 TGTTATTGGCAGTTCGAGCGACAG CTGTCGCTCGAACTGCCAATAACA 2431 GCGAGCCTTTTGCTTGGGAAGAG CTGTCCCAAGCAAAAAAGGCTCGC 2432 AGAAGAAAAGGTCAGCGTCGACGA TCGTCGACCTTTCTCT 2433 CGGGTCGACCCTTGAAGCATAACC GGTTATGCTTCAAGGGGTCGACCCG 2434 CTCGGGTTTCACAAACTTACCGCG CGCGGTAAGTTTGTAAAGACCGAG 2435 GCAGTCCTATCCGGAGCCTGACAA TTGTCAAGGGTTCGACACCT 2436 AAGGTGCGCTATTTGTTGTCGGTC GACCGACAAAAAAGCGACGC 2437 AGTGGAATCCATGCCGACACCTGA TCAGGGTCGGCACACACAAATAGCGCACCTT 2438 TACAGGCGTAATTCCTGCGAGGGA TCCCTCGCAGGAATTACGCCTT 2439 CCGAAGTGCGAGAAGCACCTTGT AACAACGTGCTTCCGCACTTCGG 2439 CCGAAGTGCGAGAAGCACCTTTT AACAACGTGCTTCTCGCACTTCGG 2440 AAGGACTGGATAGCCGGAGACTTT AAACACGTGCTTCTCGCACTTCGG 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGGCGCACTTCTC 2442 AATGGTGTTCGCCTGGACTACCAC TGGTAGTCCAGGCGAACACAATACCAGTCCTT 2443 TAGGAAAGCGTACACGAGCAATCCC GGGATTCCCGTGTACCACTCTT 2444 TCTCACCCCAATGATGC GCAACTATGAGGTTGGCGGAACACCATT 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATCAGGGTGACAC 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTTCCTA 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATCACCGGACACAC 2446 TCCAGGCTGTTGCGGATACGGC GACGTCTCATCATTTGGGTGAGACACCTTTCCTA 2448 ATCTCCGTGGACACCGGGAATCCG CACGCCCTACCACGGACACAC 2448 ACCTCCGTGTGACACTGTCCATG CATGGACACGCCTTGAC 2448 ACCTCCGTGGACCACGCTATGGCC CCCAACACACCCTTGGACACACCCTTGACACACGCTTGCCACCACACGCCTTGACACACGCTTGCCACACACCCTTGGACCACACCCTTGGACCACACACA	10	2425	TACGAGAGCGGGCTTAGACGTCGC	GCGACGTCTAAGCCCGCTCTCGTA
2428 TCCGCGAGTCTTAGCCGATTGAAC 2429 GGCATCAGCTCCGTAAGCCGATAG 2429 GGCATCAGCTCCGTAAGCCGATAG 2430 TGTTATTGGCAGTTCGAGCGACAG 2431 GCGAGCCTTTTTGCTTGGGAAGAG 2431 GCGAGCCTTTTTGCTTGGGAAGAG 2432 AGAAGAAAAGGTCAGCGTCGACGA 2432 AGAAGAAAAGGTCAGCGTCGACGA 2433 CGGGTCGACCCTTGAAGCATAACC 2433 CGGGTTCGACCCTTGAAGCATAACC 2434 CTCGGTTTTCACAAACTTACCGCG 2435 GCAGTCCTATCCGGAGCCTGACAA 2436 AAGGTGCGCTGACCAA 2437 AGTGGAATCCATCCGGAGCCTGACAA 2438 AAGGTGCGCTATTTGTTGTCGGTC 2438 TACAGGCGTAATTCCTGCGACACACTGA 2438 TACAGGCGTAATTCCTGCGAGGAC 2439 CCGAAGTGCGACACCTGA 2439 CCGAAGTGCGACACCTGA 2439 CCGAAGTGCGAGAACCACCTGA 2439 CCGAAGTGCGAGAACCACCTGA 2439 CCGAAGTGCGAGAACCACCTGT 2441 GGACACCGCCAACCTCATAGTTGC 2442 AATGGTGTTCGCCGGAGCCTTT 2441 GGACACCGCCAACCTCATAGTTGC 2442 AATGGTGTTCGCCTGGACTACCAC 2443 TACAGACGTACCACCTCATAGTTGC 2444 TCTCACCCCAATGATGAGGACCG 2444 TCTCACCCCAATGATGAGACCGC 2444 TCTCACCCCAATGATGAGACCGC 2446 TCCAGGCTGTACCACC 2447 TCTCACCCCCAATGATGAGGACGCC 2446 TCCAGGCTGTTCCATGCACCACCTCATCATTGAGGTTGACACCACGCCTGACCACCTCACCACCTCATCACCACCCTCATCACCACCCCTCATCA		2426	GCGATTTTGACCCACGGTTATCGA	TCGATAACCGTGGGTCAAAATCGC
2429 GGCATCAGCTCCGTAAGCCGATAG CTATCGGCTTACGGAGCTGATGCC 2430 TGTTATTGGCAGTTCGAGCGACAG CTGTCGCTCGAACTGCCAATAACA 2431 GCGAGCCTTTTTGCTTGGGAAGAG CTCTTCCCAAGCAAAAAGGCTCGC 2432 AGAAGAAAAGGTCAGCGTCGACGA TCGTCGACCTTTTCTTCT 2433 CGGGTCGACCCTTGAAGCATAACC GGTTATGCTTCAAGGGTCGACCG 2434 CTCGGTTTTCACAAACTTACCGCG CGCGGTAAGTTTGTGAAAACCGAG 2435 GCAGTCCTATCCGGAGCCTGACAA TTGTCAGGCTCCGGATAGGACTGC 2436 AAGGTGCCTATCCGGAGCCTGACAA TTGTCAGGCTCCGGATAGGACTGC 2437 AGTGGAATCCATGCCGACACCTGA TCAGGTGTCGGATAGGACTGC 2438 TACAGGCGTAATTTCTGCGACGAC TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACCTTGA TCAGGTGTCGGCATTGGATTCCACT 2439 CCGAAGTGCGAGAAGCACCGTGAT AACAACGTGCTTTCTGGCACTTCGG 2440 AAGGACTGGTAATTCCTGCGAGGGA TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACCGTGTT AACAACGTGCTTTCTGGCACTTCGG 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGCCGCTTTCCGC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTAGCTTCCAGGCGTACCATT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCAGTGACACACTT 2444 TCTCACCCCAATGATGAGGACGTC GCGATTCCCGTGTACGCTTTCCTA 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA 30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2447 GTAGGCAAAATGGTCGCATCAAT ATTGATCGCGACCATTTTCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCACCAGGAGAT 2449 GAAATATGCCGTCAACGCTATGGGC GCCCATAGCGGTTTGACGGAACACACACTTCCAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCACAGGAAT 2449 GAAATTGCCGTCAACGCTATGGGC GCCCATAGCGTTTGACGGCATATTC 2449 GAAATTGCCGTCAACGCTTTGGACA TGTCACAATCGGGTCACAGGAAA 2451 TTCGGAAGCGTTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2452 GGCCATTTGAGGAGCATCAG CCGCAAAAGTCCACAGGCCTGGAA 2453 ACCTTCTGACCTGGACTTTTGGCC CGCCAAAAGTCCACAGGCCTAGAAGGT 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTAAGGCC 2453 ACCTTCTGACCTGAGCATTTTGCAC TTGCACACTCAGGGCATTGGTC 2454 GACCAATCCGCAGTTTGAGCACAGCCTTCCAACAGGCCTGGAAAGGTCAACAGGCTTCCAAAGGCTTCCACACGCAGAGGTCAAAAGTCCAACAGCCTGGAAAGTCCACACAGCCTGGAAAGTCCACACGCCAAAGGTCAAAGGCCTGAAAGGCTTCCACACGCAGAGGTCAAAAGTCCACACGCCAAAGGTCAACAGCCTTACCACTCATGGGCCAAAAGTCCACACGCCAAAGGTCAACAGCCTACACACAGCCTGAAAGTCCACACAGCCTACACA		2427	AGCTGTATAATTTGGATGGCGCGA	TCGCGCCATCCAAATTATACAGCT
15 2430 TGTTATTGGCAGTTCGAGCGACAG CTGTCGCTCGAACTGCCAATAACA 2431 GCGAGCCTTTTTGCTTGGGAAGAG CTCTTCCCAAGCAAAAAGGCTCGC 2432 AGAAGAAAAGGTCAGCGTCGACGA TCGTCGACCTTTTCTTCT 2433 CGGGTCGACCCTTGAAGCATAACC GGTTATGCTTCAAGGGTCGACCCG 2434 CTCGGTTTTCACAAACTTACCGCG CGCGGTAAGTTTGTGAAAACCGAG 2435 GCAGTCCTATCCGGAGCCTGACAA TTGTCAGGCTCCGGATAGGACTGC 2436 AAGGTGCGCTATTTGTTGTCGGTC GACCGACAACAAATAGCGCACCTT 2437 AGTGGAATCCATGCCGACACCTGA TCAGGGTCGGCATGGATTCCACT 2438 TACAGGCGTAATTCCTGCGAGGAG TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACGTTGTT AACAACGTGCTTCTCGCACTTCGG 2440 AAGGACTGGTATGGCCGAGCACCTT 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATCAGCTTCCTG 2442 AATGGTGTTCGCTGGACTACCAC GTGGATTCCAGTCCTT 2443 TAGGAAAGCGTACACCTCATAGTTGC GCAACTATGAGGTTGGCGGTGCC 2444 TCTCACCCCAATGATGAGACTCC CGGATTCCCGTGTACCGCTTCCTA 2444 TCTCACCCCAATGATGAGACTCC CGGATTCCCGTGTACCGCTTTCCTA 2445 CGTGTCCGTGTACACGGGAATCCG CGGATTCCCGTGTACCACTTCCTA 2446 TCCAGGCTGTTCCATG CATGGACACGTTCAACAGGCTGGA 2447 GTAGGAAAATGGTCGCGATCAAT ATTGATCGCGAACACGGACACG 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCACACGGACACG 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCACACGGACACG 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGACACGAACCGTTGCACACGGACCGTTGACACTTTCCGCAACAGGCTTGGAACACGGTTTCCGCAACAGGCTTGGAACACGCTTGGACACGGAACACGACTTTTCCGCAACAGCCTTGCAACACGCTTTCCGCAACACGCCTTCCGCAACACGCCTTGCAACACGCTTTTCCTACAATTGCCGCAACACGCTTTCCGCAACACGCCTTGCAACACGCTTTCCGCAACACGCCTTGCAACACGCTTTCCGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTCCGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTCCGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCTTGCAACACGCCCTGGAATTTCCTACCAACCGCACCACACCACCACCACCACCACCACCACCAC		2428	TCCGCGAGTCTTAGCCGATTGAAC	GTTCAATCGGCTAAGACTCGCGGA
2431 GCGAGCCTTTTTGCTTGGGAAGAG CTCTTCCCAAGCAAAAAGGCTCGC 2432 AGAAGAAAAGGTCAGCGTCGACGA TCGTCGACGCTTTTCTTCT 2433 CGGGTCGACCCTTGAAGCATAACC GGTTATGCTTCAAGGGTCGACCCG 2434 CTCGGTTTTCACAAACTTACCGCG CGCGGTAAGTTTGTGAAAACCGAG 2435 GCAGTCCTATCCGGAGCCTGACAA TTGTCAGGGCTCCGGATAGGACTGC 2436 AAGGTGCGCTATTTGTTGTCGGTC GACCGACAACAAATAGCGCACCTT 2437 AGTGGAATCCATGCCGACACCTGA TCAGGTGTCGGCATGGATTCCACT 2438 TACAGGCGTAATTCCTGCGAGGGA TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACCTTGT AACAACGTGCTTCTCGCACTTCGG 2440 AAGGACTGGTATGGCCGGAGCTTT AACACGTGCTTCTCGCACTTCGG 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGCCGTTCC 2442 AATGGTGTCGCCTGGACTACCAC GTGGTACCCACCATCCAC 2444 TCTCACCCCAATGATGAGCACCG CGAGTTCCCATGCACACACCATT 2444 TCTCACCCCAATGATGAGGACCTC GACGTCCTCATCATTGGGGTGAGA 30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACCAC TTGACTCGCAACACGCTGGA 2447 GTAGGCAAAATGGTCGCGATCATA ATTGATCGCGACCACGGACACG 2448 ATCTCCGTGGACCCGATTGTACAC TGCACACACACGCTTGGA 2449 GAATATGCCGTAACACGGTACA TTGACCGAACACGCTTGGA 2449 GAATATGCCGTCAACGGTACA TTGACCGAACACGCTTGGA 2449 GAATATGCCGTCAACGGTACAAT ATTGATCGCGACCACGACAC 2448 ATCTCCGTGGACCCGATTGTAACA TTGACCGAACACGCTTGGA 2449 GAATATGCCGTCAACGGTACAAT ATTGATCGCGACCACTTTCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGCCACAACTCGGGTCCACGGACAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGCATATTC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGTCCACGGACAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGTTCCGGAA 2450 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCGGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTACAACGCTTCCGGAA 2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGTC 2454 GACCAATCCGCAGTTTGAGCAACAG CTGTTTGCCAACGGTCAAAGGCT 2454 GACCAATCCGCAGTTTGAGCAACAG CTGTTTGCTCAACTCCAGGGTCAGAAGTCCAGGTCAGAGGT 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCAA		2429	GGCATCAGCTCCGTAAGCCGATAG	CTATCGGCTTACGGAGCTGATGCC
2432 AGAAGAAAAGGTCAGCGTCGACGA 2433 CGGGTCGACCCTTGAAGCATAACC GGTTATGCTTCAAGGGTCGACCCG 2434 CTCGGTTTTCACAAACTTACCGCG CGCGGTAAGTTTGTGAAAACCGAG 2435 GCAGTCCTATCCGGAGCCTGACAA TTGTCAGGGTCCGGATAGGACTGC 2436 AAGGTGCGCTATTTGTTGTCGGTC GACCGACAACAAATAGCGCACCTT 2437 AGTGGAATCCATGCCGACACCTGA TCAGGTGTCGGCATGGATTCCACT 2438 TACAGGCGTAATTCCTGCGAGGGA TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACCTGA TCACGCGACATCACACTTCGG 2440 AAGGACTGGTATGGCCGGAGCTTT AACAACGTGCTTCTCGCACTTCGC 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGCCGTTCC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTTCCCAGGCGAACACCATT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCGTGACACCATT 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACGGTAC 2448 ATCTCCGTGGACCACTGTCCATG CATGGACAGTGTCACACGGACACG 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCACACGGACAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATACCAGGCATATTC 2449 GAATATGCCGTCAACGCTATGGGC GCCCATACCAGGCATATTC 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGATATTC 35 2450 TTCCGGAACGGTTTGGACA TGTCACAATCGGGTCCACGGACAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCTATTCC 3451 TTCCGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTACAACGCTTCCGGAA 2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTTGCCGCACCGGAATTTCCTACAACGGTTTCCTACAATCGGGTCAACAGGCTTCCGGAA 2455 GGCCATTTGAGGAGAGTTTTTGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 400 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGGGCAGAGGTT	15	2430	TGTTATTGGCAGTTCGAGCGACAG	CTGTCGCTCGAACTGCCAATAACA
2433 CGGGTCGACCCTTGAAGCATAACC GGTTATGCTTCAAGGGTCGACCCG 2434 CTCGGTTTTCACAAACTTACCGCG CGCGGTAAGTTTGTGAAAACCGAG 2435 GCAGTCCTATCCGGAGCCTGACAA TTGTCAGGCTCCGGATAGGACTGC 2436 AAGGTGCGCTATTTGTTGTCGGTC GACCGACAACAAATAGCGCACCTT 2437 AGTGGAATCCATGCCGACACCTGA TCAGGTGTCGGCATGGATTCCACT 2438 TACAGGCGTAATTCCTGCGAGGGA TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACGTTGTT AACAACGTGCTTCTCGCACTTCGG 2440 AAGGACTGGTATGGCCGAGACTTT AAAGCTCCGGCCATACCAGTCCTT 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGGCGGTGTCC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTACGCGTACCACTT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCGTGTACGCTTTCCTA 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA 2445 CGTGTCCGTGTACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACGTAC CATGGACAGTGTCACACGGACACG 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCACAGGACAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGCATATTC 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGATATTC 2449 GAATATGCCGTCAACGCTATGGGC CCCCATAGCGTTGACGGCATATTC 2450 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCGATAGGAATACCAGGGCCTGG CCCCATAGCGTTGACAGCCTTCCGGAA 2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCACGGATTGGTC 2454 GACCAATCCGCAGTTGAGCA CTGTTGCTCAACTGCGGATTGGTC 2454 GACCAATCCGCAGTTGAGCACACG CTGTTGTCCAACTGCGGATTGGTC 2454 GACCAATCCGCAGTTGAGCACACG CTGTGTTGCTCAACTGCGGATTGGTC 2454 GACCAATCCGCAGTTGAGCACACG CTTGTGCTCAACTGCGGATTGGTC 2454 GACCAATCCGCAGTTGAGCACACG CTTGTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTTAGGA CTTCACACTCATGGTGAGTGGCCGA		2431	GCGAGCCTTTTTGCTTGGGAAGAG	CTCTTCCCAAGCAAAAAGGCTCGC
2434 CTCGGTTTCACAAACTTACCGCG CGCGGTAAGTTTGTGAAAACCGAG 2435 GCAGTCCTATCCGGAGCCTGACAA TTGTCAGGCTCCGGATAGGACTGC 2436 AAGGTGCGCTATTTGTTGTCGGTC GACCGACAACAAATAGCGCACCTT 2437 AGTGGAATCCATGCCGACACCTGA TCAGGTGTCGGCATGGATTCCACT 2438 TACAGGCGTAATTCCTGCGAGGGA TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACGTTGTT AACAACGTGCTTCTCGCACTTCGG 2440 AAGGACTGGTATGGCCGGAGCTTT AAAGCTCCGGCCATACCAGTCCTT 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGGCGGTGTCC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTAGTCCAGGCGAACACCATT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCGTGTACGCTTTCCTA 2444 TCTCACCCCAATGATGAGGACTC GACGTCCTCATCATTGGGGTGAGA 30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTCACACGGACACCG 2446 TCCAGGCTGTTGCGGATACCATG CATGGACAGTGTCACACGGACACG 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCACAGGACT 2449 GAATATGCCGTCAACGTTGGACA TGTCACAATCGGGTCACAGGACT 35 TCCGGAACCGTTTGGTACATTTG CAAAGTTACCAACGCTTCCGGAA 2451 TTCCGGAACCGTTTGGTACATTTG CAAAGTTACCAAACGCTTCCGGAA 2452 GGCCATTTGGACACTTTTGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGCCG CGCCAAAAGTCCACGGACAGT 2454 GACCAATCCGCAGTTTGAGCA CTGTTGCCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGGTTAGG CCTCACACTGCGGATTGGTC 40 CCTACACTCATGGTGAGGAGTTGGTC		2432	AGAAGAAAAGGTCAGCGTCGACGA	TCGTCGACGCTGACCTTTTCTTCT
2435 GCAGTCCTATCCGGAGCCTGACAA TTGTCAGGCTCCGGATAGGACTGC 2436 AAGGTGCGCTATTTGTTGTCGGTC GACCGACAACAAATAGCGCACCTT 2437 AGTGGAATCCATGCCGACACCTGA TCAGGTGTCGGCATGGATTCCACT 2438 TACAGGCGTAATTCCTGCGAGGGA TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACGTTGTT AACAACGTGCTTCTCGCACTTCGG 2440 AAGGACTGGTATGGCCGGAGCTTT AAAGCTCCGGCCATACCAGTCCTT 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGCGGGTGTCC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTAGTCCAGGCGAACACCATT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCAGGCGAACACCATT 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATAGTGGGTGAGA 30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCAGCTGGA 2448 ATCTCCGTGGACCCGATTGTACA TTGCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGC GCCCATAGCGTTGACGGACATTTC 35 TCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGAA 2450 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGAA 2451 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGAA 2452 GGCCATTTGAGGACATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CCCCAAAAGTCCCAGGTCAACAGCT 2454 GACCAATCCGCAGTTTAGCAA CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAAG CCTACCTCATGGTGAAGTGCCAA		2433	CGGGTCGACCCTTGAAGCATAACC	GGTTATGCTTCAAGGGTCGACCCG
2436 AAGGTGCGCTATTTGTTGTCGGTC GACCGACAACAAATAGCGCACCTT 2437 AGTGGAATCCATGCCGACACCTGA TCAGGTGTCGGCATGGATTCCACT 2438 TACAGGCGTAATTCCTGCGAGGGA TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACGTTGTT AACAACGTGCTTCTCGCACTTCGG 2440 AAGGACTGGTATGGCCGGAGCTTT AACAACGTGCTTCTCGCACTTCGG 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGGCGGTGTCC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTAGTCCAGGCGAACACCATT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCGTGTACGCTTTCCTA 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA 30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATCACT CATGGACAGTGTCACACGGACACG 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGCATATTC 35 TCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCGATAGGAATACCAGGGCCTGG CCCAGGCCCTGGTATTCCTACCAACGCTTCCGGAA 2452 GGCCATTTGAGGAGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGCCG CGCCAAAAGTCCAGGTCCACAAGGCT 2454 GACCAATCCGCAGTTTGAGCA CTGTTGCTCAACTGCGCCAACAGGCTTCCAAATGGCC 2455 TCCGCCACTCACCATGAGCACACG CTGTTGCTCAACTGCGCCAAAAGTCCAGGTCAGAAAGGT 2454 GACCAATCCGCAGTTGAGCACACG CTGTTGCTCAACTGCGCCAAAAGTCCAGCTCAGAAGGT 2455 TCCGCCACTCACCATGAGTGAGG CCTACACTCATGGTGAGTGGCCAA		2434	CTCGGTTTTCACAAACTTACCGCG	CGCGGTAAGTTTGTGAAAACCGAG
2437 AGTGGAATCCATGCCGACACCTGA TCAGGTGTCGGCATGGATTCCACT 2438 TACAGGCGTAATTCCTGCGAGGGA TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACGTTGTT AACAACGTGCTTCTCGCACTTCGG 2440 AAGGACTGGTATGGCCGGAGCTTT AACAACGTGCTTCTCGCACTTCGG 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGGCGGTGTCC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTAGTCCAGGCGAACACCATT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCGTGTACGCTTTCCTA 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA 30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATTTTC 35 2450 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCGGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTACAATGGCC 2453 ACCTTCTGACCTGACTTTTGCCG CGCCAAAAGTCCACAGGCT 2454 GACCAATCCGCAGTTTTGCCG CGCCAAAAGTCCAGGTCAAATGGCC 2453 ACCTTCTGACCTGACTTTTTGCCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCAA	20	2435	GCAGTCCTATCCGGAGCCTGACAA	TTGTCAGGCTCCGGATAGGACTGC
2438 TACAGGCGTAATTCCTGCGAGGGA TCCCTCGCAGGAATTACGCCTGTA 2439 CCGAAGTGCGAGAAGCACGTTGTT AACAACGTGCTTCTCGCACTTCGG 2440 AAGGACTGGTATGGCCGGAGCTTT AAAGCTCCGGCCATACCAGTCCTT 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGGCGGTGTCC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTAGTCCAGGCGAACACCATT 2443 TAGGAAAGCGTACACGGGGAATCCG CGGATTCCCGTGTACGCTTTCCTA 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA 30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC 35 TCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCCTACACTCATGGGCCAA		2436	AAGGTGCGCTATTTGTTGTCGGTC	GACCGACAACAAATAGCGCACCTT
2439 CCGAAGTGCGAGAAGCACGTTGTT AACAACGTGCTTCTCGCACTTCGG 2440 AAGGACTGGTATGGCCGGAGCTTT AAAGCTCCGGCCATACCAGTCCTT 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGGCGGTGTCC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTAGTCCAGGCGAACACCATT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCGTGTACGCTTTCCTA 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA 30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC 35 2450 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCGGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTATCGAA 2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCCTACACTCATGGGAATTGGTC		2437	AGTGGAATCCATGCCGACACCTGA	TCAGGTGTCGGCATGGATTCCACT
2440 AAGGACTGGTATGGCCGGAGCTTT AAAGCTCCGGCCATACCAGTCCTT 2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGGCGGTGTCC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTAGTCCAGGCGAACACCATT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCGTGTACGCTTTCCTA 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA 30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC 35 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2452 GGCCATTTGAGGAGGACTTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2438	TACAGGCGTAATTCCTGCGAGGGA	TCCCTCGCAGGAATTACGCCTGTA
2441 GGACACCGCCAACCTCATAGTTGC GCAACTATGAGGTTGGCGGTGTCC 2442 AATGGTGTTCGCCTGGACTACCAC GTGGTAGTCCAGGCGAACACCATT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCGTGTACGCTTTCCTA 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA 30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC 35 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCCGTAGGAGTACTTTG CAAAGTTACCAAACGCTTCCGGAA 2452 GGCCATTTGAGGAGGACTTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2439	CCGAAGTGCGAGAAGCACGTTGTT	AACAACGTGCTTCTCGCACTTCGG
2442 AATGGTGTTCGCCTGGACTACCAC GTGGTAGTCCAGGCGAACACCATT 2443 TAGGAAAGCGTACACGGGAATCCG CGGATTCCCGTGTACGCTTTCCTA 2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA  30 2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC 35 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2452 GGCCATTTGAGGAGGCCTGG CCAGGCCCTGGTATTCCTATCGAA 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA	25	2440	AAGGACTGGTATGGCCGGAGCTTT	AAAGCTCCGGCCATACCAGTCCTT
TAGGAAAGCGTACACGGGAATCCG CGGATTCCCGTGTACGCTTTCCTA  2444 TCTCACCCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA  2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG  2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA  2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC  2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT  2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC  35 TCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA  2451 TTCCGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTATCGAA  2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC  2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT  2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC  40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGACGCCAA		2441	GGACACCGCCAACCTCATAGTTGC	GCAACTATGAGGTTGGCGGTGTCC
2444 TCTCACCCAATGATGAGGACGTC GACGTCCTCATCATTGGGGTGAGA  2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG  2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA  2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC  2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT  2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC  35 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA  2451 TTCGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTATCGAA  2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC  2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT  2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC  40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2442	AATGGTGTTCGCCTGGACTACCAC	GTGGTAGTCCAGGCGAACACCATT
2445 CGTGTCCGTGTGACACTGTCCATG CATGGACAGTGTCACACGGACACG 2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC 35 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTATCGAA 2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGCAA		2443	TAGGAAAGCGTACACGGGAATCCG	CGGATTCCCGTGTACGCTTTCCTA
2446 TCCAGGCTGTTGCGGATACGGTAG CTACCGTATCCGCAACAGCCTGGA 2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC 35 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTATCGAA 2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2444	TCTCACCCCAATGATGAGGACGTC	GACGTCCTCATCATTGGGGTGAGA
2447 GTAGGCAAAATGGTCGCGATCAAT ATTGATCGCGACCATTTTGCCTAC 2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC 35 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTATCGAA 2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA	30	2445	CGTGTCCGTGTGACACTGTCCATG	CATGGACAGTGTCACACGGACACG
2448 ATCTCCGTGGACCCGATTGTGACA TGTCACAATCGGGTCCACGGAGAT 2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC  2450 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA  2451 TTCGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTATCGAA  2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC  2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT  2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC  40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2446	TCCAGGCTGTTGCGGATACGGTAG	CTACCGTATCCGCAACAGCCTGGA
2449 GAATATGCCGTCAACGCTATGGGC GCCCATAGCGTTGACGGCATATTC  2450 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA  2451 TTCGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTATCGAA  2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC  2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT  2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC  40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2447	GTAGGCAAAATGGTCGCGATCAAT	ATTGATCGCGACCATTTTGCCTAC
2450 TTCCGGAAGCGTTTGGTAACTTTG CAAAGTTACCAAACGCTTCCGGAA 2451 TTCGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTATCGAA 2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2448	ATCTCCGTGGACCCGATTGTGACA	TGTCACAATCGGGTCCACGGAGAT
2451 TTCGATAGGAATACCAGGGCCTGG CCAGGCCCTGGTATTCCTATCGAA 2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2449	GAATATGCCGTCAACGCTATGGGC	GCCCATAGCGTTGACGGCATATTC
2452 GGCCATTTGAGGAGGATTATGCAA TTGCATAATCCTCCTCAAATGGCC 2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA	35	2450	TTCCGGAAGCGTTTGGTAACTTTG	CAAAGTTACCAAACGCTTCCGGAA
2453 ACCTTCTGACCTGGACTTTTGGCG CGCCAAAAGTCCAGGTCAGAAGGT 2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2451	TTCGATAGGAATACCAGGGCCTGG	CCAGGCCCTGGTATTCCTATCGAA
2454 GACCAATCCGCAGTTGAGCAACAG CTGTTGCTCAACTGCGGATTGGTC 40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2452	GGCCATTTGAGGAGGATTATGCAA	TTGCATAATCCTCCTCAAATGGCC
40 2455 TCGGCCACTCACCATGAGTGTAGG CCTACACTCATGGTGAGTGGCCGA		2453	ACCTTCTGACCTGGACTTTTGGCG	CGCCAAAAGTCCAGGTCAGAAGGT
		2454	GACCAATCCGCAGTTGAGCAACAG	CTGTTGCTCAACTGCGGATTGGTC
2456 AGCGCTCACATGTTCGAAAACGGG CCCGTTTTCGAACATGTGAGCGCT	40	2455	TCGGCCACTCACCATGAGTGTAGG	CCTACACTCATGGTGAGTGGCCGA
		2456	AGCGCTCACATGTTCGAAAACGGG	CCCGTTTTCGAACATGTGAGCGCT

	2457	TAACGCAAAGGCGCGATCCTCGCT	AGCGAGGATCGCGCCTTTGCGTTA
	2458	TGGGTGGGCCAAATATTACTGCAA	TTGCAGTAATATTTGGCCCACCCA
	2459	GTCCTCGAAAGGGGCATCCAAACA	TGTTTGGATGCCCCTTTCGAGGAC
	2460	CCCATCTGGTGGGAGGCGTTATCA	TGATAACGCCTCCCACCAGATGGG
5	2461	GTGCGCGGTCTGCAAACTCGCCAT	ATGGCGAGTTTGCAGACCGCGCAC
	2462	TGTGTTGCCAACCCTAGGTCATCA	TGATGACCTAGGGTTGGCAACACA
	2463	CTGATGCTGTTCTCGTCGGTTGAC	GTCAACCGACGAGAACAGCATCAG
	2464	AAGCTGCAAAAGGTGAGCGTGGCA	TGCCACGCTCACCTTTTGCAGCTT
	2465	TCTGACGCGTGCTTGGGAGTCTAT	ATAGACTCCCAAGCACGCGTCAGA
10	2466	GAATTACTTGGAGGCGCCGTGCAA	TTGCACGGCGCCTCCAAGTAATTC
	2467	GATTCTTCCCGACCTAGGTTGGCC	GGCCAACCTAGGTCGGGAAGAATC
	2468	CGCAGCGTATCCCATGTTGCTTGA	TCAAGCAACATGGGATACGCTGCG
	2469	GAGATGGAATTGTTCGCCCAAAGA	TCTTTGGGCGAACAATTCCATCTC
	2470	GATGCCTGGATCGGTCTAGCGTCA	TGACGCTAGACCGATCCAGGCATC
15	2471	GCAGCGACTGCTAAGCTATCTCGG	CCGAGATAGCTTAGCAGTCGCTGC
	2472	AGGGCTAATTTACATCGCCTTGCC	GGCAAGGCGATGTAAATTAGCCCT
	2473	AAGTGCACATCCTCACGAAGCGAT	ATCGCTTCGTGAGGATGTGCACTT
	2474	TCAGGCAGCCGTAATTAAATGCGC	GCGCATTTAATTACGGCTGCCTGA
	2475	CCACTGGGGAAATCGCACTGTTGG	CCAACAGTGCGATTTCCCCAGTGG
20	2476	TTGTCCAAAGCCACCTACGACAGA	TCTGTCGTAGGTGGCTTTGGACAA
	2477	TGGGCGGAATAGATTGGGTGTCTT	AAGACACCCAATCTATTCCGCCCA
	2478	TAGAATTCGCCTCTTCTAGCCGCC	GGCGGCTAGAAGAGGCGAATTCTA
	2479	CATTACTTCCTGCAGATGCGATGC	GCATCGCATCTGCAGGAAGTAATG
	2480	GGAAATGCTAGCTGGGGTAATCGC	GCGATTACCCCAGCTAGCATTTCC
25	2481	GCCGCCACTTGCGAATCTACATCT	AGATGTAGATTCGCAAGTGGCGGC
	2482	ACAATAGCGGACAGCTCGCCAGAT	ATCTGGCGAGCTGTCCGCTATTGT
	2483	AGTTAGGCTCTCGGTGCGGTCCAT	ATGGACCGCACCGAGAGCCTAACT
	2484	TGGGCCTGAGAAGCGGTTAATAGG.	CCTATTAACCGCTTCTCAGGCCCA
	2485	ACGCTCTGAGCGACGCCTATCGTA	TACGATAGGCGTCGCTCAGAGCGT
30	2486	CCTGGTGATCGTGTCCCAGACTCA	TGAGTCTGGGACACGATCACCAGG
	2487	GCGTGTCCATTCGCTTGAGGTTTC	GAAACCTCAAGCGAATGGACACGC
	2488	ATCCTGAACGCCGATGACCACCAC	GTGGTGGTCATCGCCGTTCAGGAT
	2489	TTACGTTTCTCACCGATCAACGCC	GGCGTTGATCGGTGAGAAACGTAA
	2490	GCCGTCTTGAGTGGCTAAAAGGCA	TGCCTTTTAGCCACTCAAGACGGC
35	2491	ATCTACGATGCGGCTCGAAGTGTT	AACACTTCGAGCCGCATCGTAGAT
	2492	AACCAAGACTCGTCCCCAAACGAA	TTCGTTTGGGGACGAGTCTTGGTT
	2493	AACTGCGGTGGTGGAGGCAGGTGC	GCACCTGCCTCCACCACCGCAGTT
	2494	TGCGATCTTCTCCACCTACAGCGC	GCGCTGTAGGTGGAGAAGATCGCA
	2495	AGGCGCTTAGAACCGTGAAGGCAG	CTGCCTTCACGGTTCTAAGCGCCT
40	2496	TGGAAAATTTTGGGAAACGCTGGA	TCCAGCGTTTCCCAAAATTTTCCA
	2497	CCAGCGCCGCACCTTCTCCAATAG	CTATTGGAGAAGGTGCGGCGCTGG

	2498	TAGACGGCTGGCGAATCTTACGGT	ACCGTAAGATTCGCCAGCCGTCTA
	2499	TACCATACAAGAGAACGAGCCGCA	TGCGGCTCGTTCTCTTGTATGGTA
	2500	GTAGCCGAGAGCAATTTTCACCGC	GCGGTGAAAATTGCTCTCGGCTAC
	2501	GCAAACTCCCCTGCCCTTTAGCCT	AGGCTAAAGGGCAGGGGAGTTTGC
5	2502	ATCCCGCTGATAACCGCCAGGATA	TATCCTGGCGGTTATCAGCGGGAT
	2503	AGTCTCAGTTCGGCGCAACGGTAG	CTACCGTTGCGCCGAACTGAGACT
	2504	AACCTACAGTCGCCGCAATGCATT	AATGCATTGCGGCGACTGTAGGTT
	2505	ATACACGTTTCAGCCGGCAACAAT	ATTGTTGCCGGCTGAAACGTGTAT
	2506	ACGACGGGACGTGCCCTCGTTGAT	ATCAACGAGGGCACGTCCCGTCGT
10	2507	AAGTCCAAACTCGAATGGGGCAGT	ACTGCCCCATTCGAGTTTGGACTT
	2508	GATTTATTGGCGCGGTAACGACCT	AGGTCGTTACCGCGCCAATAAATC
	2509	TGTTTTCAGAGGCTACCCTGCCAT	ATGGCAGGGTAGCCTCTGAAAACA
	2510	ACGGTCTCAGGGAAATGCGATCTC	GAGATCGCATTTCCCTGAGACCGT
	2511	GACTTGAAACCGCCTATGCCCACA	TGTGGGCATAGGCGGTTTCAAGTC
15	2512	CGATCGGTTGTGTGCTGTCTTACC	GGTAAGACAGCACAACCGATCG
	2513	AGTAGCACAATGCCTCATTTCCGC	GCGGAAATGAGGCATTGTGCTACT
	2514	CTCGCTATCTACGCGTCTCCGAAA	TTTCGGAGACGCGTAGATAGCGAG
	2515	AGCCCGTTACGGCATCTAGGATTC	GAATCCTAGATGCCGTAACGGGCT
	2516	TCGCGATGGCGAGAGTTCAGAATA	TATTCTGAACTCTCGCCATCGCGA
20	2517	TTACAGGATTCCAAAACCCGCAAA	TTTGCGGGTTTTGGAATCCTGTAA
	2518	CGGTACCAACGCGCGGGCATATGA	TCATATGCCCGCGCGTTGGTACCG
•	2519	TGCCAGTATTATCCGTGCCAGCCG	CGGCTGGCACGGATAATACTGGCA
	2520	ATTTCAGACCTCGGGACAACCTGG	CCAGGTTGTCCCGAGGTCTGAAAT
	2521	GAAGTGCGCGTAACTTAGGGAGCC	GGCTCCCTAAGTTACGCGCACTTC
25	2522	TTGGCCAGGTCATCACTCTGCCAT	ATGGCAGAGTGATGACCTGGCCAA
	2523	ATCGGCCGGTATTAGCTGCCCTCC	GGAGGCAGCTAATACCGGCCGAT
	2524	CGCAGGTAAGGCCGAGCAATGTTT	AAACATTGCTCGGCCTTACCTGCG
	2525	TTGGGAACGTGCTAGGCGGCCCTC	GAGGGCCGCCTAGCACGTTCCCAA
	2526	CATCTCGGCACACTGGTGCTGTAT	ATACAGCACCAGTGTGCCGAGATG
30	2527	ACGCGTAAATCAACGACGTGGTCG	CGACCACGTCGTTGATTTACGCGT
	2528	CGTAGGTGGTAAATGTTGGCCCAG	CTGGGCCAACATTTACCACCTACG
	2529	TTCGAGCCAGAATAAAACGGTTGG	CCAACCGTTTTATTCTGGCTCGAA
	2530	AGAGATATTCGGCCTCGGTCGAGA	TCTCGACCGAGGCCGAATATCTCT
	2531	CGACAAAGTTTCTCGCGAGCAACT	AGTTGCTCGCGAGAAACTTTGTCG
35	2532	ATTGCCGCGTCTCGTATCAAAAGA	TCTTTGATACGAGACGCGGCAAT
•	2533	CGGAGAATGGATGCAGGTTCTTCG	CGAAGAACCTGCATCCATTCTCCG
	2534	TATAATCATTTGCGACTCGCCCCA	TGGGGCGAGTCGCAAATGATTATA
	2535	AATTTTCCCCGATTTGAAGAAGCG	CGCTTCTTCAAATCGGGGAAAATT
	2536	TCGCATACTTCGTCGGCGAGTATT	AATACTCGCCGACGAAGTATGCGA
40	2537	CGTGAGCCGTTCTCATCCAAGCGG	CCGCTTGGATGAGAACGGCTCACG
	2538	GCAGAATCGAATTGGGGTGGGTTT	AAACCCACCCCAATTCGATTCTGC

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	2539	CTCTCGGTTTCTCAACCGAGCTCG	CGAGCTCGGTTGAGAAACCGAGAG
	2540	GACCAGTTAGTGCAATGGTTGGCG	CGCCAACCATTGCACTAACTGGTC
	2541	TTCTCGCACAGCTAGTCAGCCGAT	ATCGGCTGACTAGCTGTGCGAGAA
	2542	CCAAGTCTTGCGTGAGCGATCCTG	CAGGATCGCTCACGCAAGACTTGG
5	2543	GCGAAAGTGGCTCGTATTTCTCCA	TGGAGAAATACGAGCCACTTTCGC
	2544	CCTCGGGACTGTCCGACTGAAAAA	TTTTCAGTCGGACAGTCCCGAGG
	2545	AGGCGAGTGTACGGCTCATCCATG	CATGGATGAGCCGTACACTCGCCT
	2546	GCGGCTCTGCCTACGATATTCACA	TGTGAATATCGTAGGCAGAGCCGC
	2547	TGCACCTGTCTGTAGATTTGCGGT	ACCGCAAATCTACAGACAGGTGCA
10	2548	CATAAAGCACGGACGCGACTTGAT	ATCAAGTCGCGTCCGTGCTTTATG
	2549	CCCTCAACGTAGGGCGTGACTTTC	GAAAGTCACGCCCTACGTTGAGGG
	2550	GGGTCATCGTGCAGTTATGCCGTA	TACGGCATAACTGCACGATGACCC
	2551	CCCGGATAATCCTTTGTCCAGCCG	CGGCTGGACAAAGGATTATCCGGG
	2552	TCCGATAAGCGAACTCACATGGGT	ACCCATGTGAGTTCGCTTATCGGA
15	2553	CCTGCTGGTTCGGTCGTAAGCGAA	TTCGCTTACGACCGAACCAGCAGG
	2554	GAGGCACCAATCGGTCTGAAAATG	CATTTCAGACCGATTGGTGCCTC
	2555	TACGAAAATGGTTGCGCCGGGTCT	AGACCCGGCGCAACCATTTTCGTA
	2556	AATTGCCGGAAGCAGTCAGAATCG	CGATTCTGACTGCTTCCGGCAATT
	2557	CCGAATCAGCCGTATTTGCTGGAA	TTCCAGCAAATACGGCTGATTCGG
20	2558	CCCGCTTATCTGTACTCGATCGCA	TGCGATCGAGTACAGATAAGCGGG
	2559	TTTTGGGGATCCCTATTAGGCGCA	TGCGCCTAATAGGGATCCCCAAAA
	2560	AGTGACAGCGCTCACCACGGTCCC	GGGACCGTGGTGAGCGCTGTCACT
	2561	CCATGAGTGTTTCGGGACATCGTA	TACGATGTCCCGAAACACTCATGG
	2562	GCCACATTCTGCTACCTCCGTGTT	AACACGGAGGTAGCAGAATGTGGC
25	2563	TCCTGTGCTTTGTGACGTGCTAGG	CCTAGCACGTCACAAAGCACAGGA
	2564	GACCGCATATACACCTGATGGGCC	GGCCCATCAGGTGTATATGCGGTC
	2565	GTAGGCCCGTCGTTAACCATCTCA	TGAGATGGTTAACGACGGGCCTAC
•	2566	CGGCTCGCGAAATGGAGTTTAGCG	CGCTAAACTCCATTTCGCGAGCCG
	2567	GCTGATCGGCTTTTCACCGCTATA	TATAGCGGTGAAAAGCCGATCAGC
30	2568	TATCAAATCGTTGGCACGCGACTA	TAGTCGCGTGCCAACGATTTGATA
	2569	TTGGCGAGGATCCCTAGGCGTACT	AGTACGCCTAGGGATCCTCGCCAA
	2570	AAGTCCTGAGGCCGTTCGGTTTCT	AGAAACCGAACGGCCTCAGGACTT
	2571	ACTCCGGACATCTCGGCCAGAGAT	ATCTCTGGCCGAGATGTCCGGAGT
	2572	CCAAGGGGAACACAGGATCGTAGA	TCTACGATCCTGTGTTCCCCTTGG
35	2573	GTGGCCTAAATCCGCCTTCTCAAC	GTTGAGAAGGCGGATTTAGGCCAC
	2574	CACTCCGTCTCGTCCATTAATGCG	CGCATTAATGGACGAGACGGAGTG
	2575	TCAAGAACCCAGTGCCGGTCAGCA	TGCTGACCGGCACTGGGTTCTTGA
	2576	GAATCAATTTTCCAGGGACGGGAC	GTCCCGTCCCTGGAAAATTGATTC
	2577	ATCGGTGTGCTGGAGCGCCAGAGT	ACTCTGGCGCTCCAGCACACCGAT
40	2578	GCCTCTCCTATGACGATGACCCAC	GTGGGTCATCGTCATAGGAGAGGC
	2579	TGGGCGCGCTTTTAAGACTACATC	GATGTAGTCTTAAAAGCGCGCCCA

	2580	CGTTGGGTACCGTTCTATCAACCG	CGGTTGATAGAACGGTACCCAACG
	2581	GCAGTGAGCTGGGTTCAATGCTTC	GAAGCATTGAACCCAGCTCACTGC
	2582	CATCATCCACACAGGCAGGTGTGT	ACACACCTGCCTGTGTGGATGATG
	2583	AGACAAAGGTCCCCATTGCGAAAT	ATTTCGCAATGGGGACCTTTGTCT
5	2584	ATACTCGTCGACGAGAAGCGGAAA	TTTCCGCTTCTCGTCGACGAGTAT
	2585	GCAGAATGTGTTGTCTTCGCAGCC	GGCTGCGAAGACAACACATTCTGC
	2586	CACCATGCCTTCATCTTGGCCTAG	CTAGGCCAAGATGAAGGCATGGTG
	2587	ACTCTTCAACGCCAGGTTAAGCCA	TGGCTTAACCTGGCGTTGAAGAGT
	2588	GCGACCTGCGGCGTGTGTATTCTC	GAGAATACACACGCCGCAGGTCGC
10	2589	TCGGTGTATGCACCCTTTCTCCAT	ATGGAGAAAGGGTGCATACACCGA
	2590	ACCGTCGAATCTTGCGGCCAATGT	ACATTGGCCGCAAGATTCGACGGT
	2591	TAATGCATGCTCCCGGCTCACGTT	AACGTGAGCCGGGAGCATGCATTA
	2592	TCTGTACACACCACGTCGTGCACA	TGTGCACGACGTGGTGTGTACAGA
	2593	CATGGGGTTGTCAGACGACACCTA	TAGGTGTCGTCTGACAACCCCATG
15	2594	AATCTGATGCTCGCTGTAGGACGG	CCGTCCTACAGCGAGCATCAGATT
	2595	TCGAAACCGCGGGAAAGGGTAAAA	TTTTACCCTTTCCCGCGGTTTCGA
	2596	TGGGGACGGCGTCTAATCCTCC	GGAGGATTAGACGCCCGTCCCCA
	2597	AGGCATGCACCCATGCTGCCAGAG	CTCTGGCAGCATGGGTGCATGCCT
	2598	TCCCAATGGCCTGTCAAGCATAAA	TTTATGCTTGACAGGCCATTGGGA
20	2599	GAACCTGAGCCTTTGCTAGCACGA	TCGTGCTAGCAAAGGCTCAGGTTC
	2600	CGAATTGATAGCGTTACGGGCGAA	TTCGCCCGTAACGCTATCAATTCG
	2601	TTGCACGCGCGCGAACGACTATTC	GAATAGTCGTTCGCGCGCGTGCAA
	2602	TGCGGTGAAGCAGTCCAAGGTCAG	CTGACCTTGGACTGCTTCACCGCA
	2603	TGAGGACCATCCAATGGATCGGTT	AACCGATCCATTGGATGGTCCTCA
25	2604	TCGGTGATTGGTAATTTGGATCCG	CGGATCCAAATTACCAATCACCGA
	2605	GCGGCAGGTAGTTTGACTGGATG	CATCCAGTCAAACTACCTGCCCGC
	2606	CAAGCACAAGCCCATGAAATTTCA	TGAAATTTCATGGGCTTGTGCTTG
	2607	CGGTACAGCGATAGCCAAGGATA	TATCCTTGGCTATCCGCTGTACCG
	2608	CCATGCTCTTCGCTGCAGCATACT	AGTATGCTGCAGCGAAGAGCATGG
30	2609	CGCGGCAAAGATTAATTCCCGGCG	CGCCGGGAATTAATCTTTGCCGCG
	2610	GAAGACCCGTCCGGGTTTCCATAC	GTATGGAAACCCGGACGGGTCTTC
	2611	CTGGCAAGGAGGATGTGGCTCGTG	CACGAGCCACATCCTCCTTGCCAG
	2612	CTGTGCAGGGGGTGGCTCTGTTGA	TCAACAGAGCCACCCCTGCACAG
	2613	TTCAATAATGATCACGAGGCCCCA	TGGGGCCTCGTGATCATTATTGAA
35	2614	TGGTGATGCGAAGCCTTACCTTTG	CAAAGGTAAGGCTTCGCATCACCA
	2615	CTGCCACCATCTACGGCGCAGTCT	AGACTGCGCCGTAGATGGTGGCAG
	2616	TTTGCCCAGCTCTCGCAGAAGTTA	TAACTTCTGCGAGAGCTGGGCAAA
	2617	AATTCAGACGCCACATCGACGGTC	GACCGTCGATGTGGCGTCTGAATT
	2618	CCGTGGTCTGCCTCGATTACCTAC	GTAGGTAATCGAGGCAGACCACGG
40	2619	GGCGAGGAATTTCGGAACCTTATG	CATAAGGTTCCGAAATTCCTCGCC
	2620	ATCCGATGATCAGATACCGGCTGG	CCAGCCGGTATCTGATCATCGGAT

	2621	CCATAGACTAGCGCCAGAGTGCCC	GGGCACTCTGGCGCTAGTCTATGG
	2622	TGTGGACCTAGAAAATTGCCAGCC	GGCTGGCAATTTTCTAGGTCCACA
	2623	GAATAATCATCGCGGTCCTCATGG	CCATGAGGACCGCGATGATTATTC
	2624	GGGATTGGCTCTTGGTTGGAAGAA	TTCTTCCAACCAAGAGCCAATCCC
5	2625	ATTGTGCTTCCTCGAACTGGGAAA	TTTCCCAGTTCGAGGAAGCACAAT
	2626	TGCCCACCCGTAAGTCAATAAT	ATTATTGACTTACGGGGTGGGGCA
	2627	TCAGGACCGACGGTGCACTTAGTG	CACTAAGTGCACCGTCGGTCCTGA
	2628	CCAGCCGTCACAGTGCAATTTCCG	CGGAAATTGCACTGTGACGGCTGG
	2629	CTTAAAGAGGCGCGAAGCACAACA	TGTTGTGCTTCGCGCCTCTTTAAG
10	2630	TACCGCTCGTCGCGATCACAATGA	TCATTGTGATCGCGACGAGCGGTA
	2631	CCGAGTGCGCGAAGTGTCTATGTG	CACATAGACACTTCGCGCACTCGG
	2632	GCACCAGTGCCCGATCAAAACGTA	TACGTTTTGATCGGGCACTGGTGC
	2633	TGCAGGCTTCTCAACGGCTGGGAG	CTCCCAGCCGTTGAGAAGCCTGCA
	2634	CTCCGTACGTATCCCGCGTGATAC	GTATCACGCGGGATACGTACGGAG
15	2635	GGAAGTGCAACTTAAAGCCCCGCC	GGCGGGCTTTAAGTTGCACTTCC
	2636	CGAACCGGCAGTCGATCGTTGCAT	ATGCAACGATCGACTGCCGGTTCG
	2637	CCGTTAGTGGTCGACAGTTCGGTT	AACCGAACTGTCGACCACTAACGG
	2638	TCAGGCTACGCCCTCAGCACTACA	TGTAGTGCTGAGGGGGGTAGCCTGA
	2639	TATACGGGCCGAGGTCCGTATTCG	CGAATACGGACCTCGGCCCGTATA
20	2640	CCAACGTGTGACGAAGGGCCATTG	CAATGGCCCTTCGTCACACGTTGG
	2641	CTGCTCAGCGGTGCTTGAAAGACA	TGTCTTTCAAGCACCGCTGAGCAG
	2642	GGAGATTGACTTCGCGTTTCACCA	TGGTGAAACGCGAAGTCAATCTCC
	2643	ATGGTTCAGAAGGTTCGTCGGGTT	AACCCGACGAACCTTCTGAACCAT
	2644	GAGTGGAGCATTCTCGGCCCTCAA	TTGAGGGCCGAGAATGCTCCACTC
25	2645	TGGATTGGAACCAATCCCGCACAA	TTGTGCGGGATTGGTTCCAATCCA
	2646	TGCTCTTGTGGTCACTCGAGAGGA	TCCTCTCGAGTGACCACAAGAGCA
	2647	TTGGGAGCACGGTTACCGCCTGTG	CACAGGCGGTAACCGTGCTCCCAA
	2648	CAACGCGAGCTAACGGTAGTTTCG	CGAAACTACCGTTAGCTCGCGTTG
	2649	AACGCTGAGCGCTCACCTTCACCT	AGGTGAAGGTGAGCGCTCAGCGTT
30	2650	CCGTCGTAGATCTGGAGGCTTCAA	TTGAAGCCTCCAGATCTACGACGG
	2651	GGATGGCATGGGCACACTGTAACC	GGTTACAGTGTGCCCATGCCATCC
	2652	TCGCTCGTAGATATCCTTCACGCC	GGCGTGAAGGATATCTACGAGCGA
	2653	GGAGCAATACCGCGTCCAAAACAC	GTGTTTTGGACGCGGTATTGCTCC
	2654	TTGTTCAGACTTAGGCGCTGCCCA	TGGGCAGCGCCTAAGTCTGAACAA
35	2655	CGGCGGTACTCTTTCCACTGTCCT	AGGACAGTGGAAAGAGTACCGCCG
	2656	AAGACGATTGCCCACGTGCCAGAG	CTCTGGCACGTGGGCAATCGTCTT
	2657	AGGTGAGCGCAGGCATATTGCAGT	ACTGCAATATGCCTGCGCTCACCT
	2658	CTCGGGCCTGTACAGCAAAGCCGT	ACGGCTTTGCTGTACAGGCCCGAG
	2659	TGCGCGCTAGTGCTGCCTATGATC	GATCATAGGCAGCACTAGCGCGCA
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	2661	AACAACAGCGTAAGACGGACAGGG	CCCTGTCCGTCTTACGCTGTTGTT

	2662	GAGGCGGTCGAGGCTCACAATATT	AATATTGTGAGCCTCGACCGCCTC
	2663	CGAGGTTAGACGCCTATGACCCAC	GTGGGTCATAGGCGTCTAACCTCG
	2664	AACTTGCTATACCGGGCGCAGCAA	TTGCTGCGCCCGGTATAGCAAGTT
	2665	CGCGGTGAATCGCATACACAGCGC	GCGCTGTGTATGCGATTCACCGCG
5	2666	CACCGAATCAAGCCATATGGCTCT	AGAGCCATATGGCTTGATTCGGTG
	2667	TTCACAGCTATCCTAGGCGCTGCC	GGCAGCGCCTAGGATAGCTGTGAA
	2668	AGAAGCGCGAAGTGTACCCCGCAT	ATGCGGGGTACACTTCGCGCTTCT
	2669	TGCATGGTATTTGCGTGCGATAGG	CCTATCGCACGCAAATACCATGCA
	2670	GGCCGGACCTATGTGAGATGGAAA	TTTCCATCTCACATAGGTCCGGCC
10	2671	TCAACCTGAGTCCTGATCCCAAGC	GCTTGGGATCAGGACTCAGGTTGA
	2672	TGCTTACCGTTCAGGGAGGCGTGT	ACACGCCTCCCTGAACGGTAAGCA
	2673	GGAGAGTTACGCGATGAGCCACCT	AGGTGGCTCATCGCGTAACTCTCC
	2674	CGGTATGCGGTGTACAGCTTTCGT	ACGAAAGCTGTACACCGCATACCG
	2675	GTAAGCCGGGTCTCGTGTCGCCGT	ACGGCGACACGAGACCCGGCTTAC
15	2676	GCGTAGTGCGAACGCCCCGACCTA	TAGGTCGGGGCGTTCGCACTACGC
	2677	TCCTCGCGGCTTACGTCAAATTCG	CGAATTTGACGTAAGCCGCGAGGA
	2678	CGACGTTCAAAGCGGGAGAGGAGG	CCTCCTCCCGCTTTGAACGTCG
	2679	CGAGGCACCCCGACATGTTGAGAT	ATCTCAACATGTCGGGGTGCCTCG
	2680	CTATTTCGTGCCGCGTCGGACAAG	CTTGTCCGACGCGCACGAAATAG
20	2681	GGCTGCTCAGTGACGTGTCAACTG	CAGTTGACACGTCACTGAGCAGCC
	2682	ATCACTCGTGCGTACCCGACCGTC	GACGGTCGGGTACGCACGAGTGAT
	2683	CGAGATGTCCTATACCGTGGCGAA	TTCGCCACGGTATAGGACATCTCG
	2684	TCACACCGAGCCCCATAAATGAAA	TTTCATTTATGGGGCTCGGTGTGA
	2685	AGCTACGTGTCTCGAGCAAAAGCG	CGCTTTTGCTCGAGACACGTAGCT
25	2686	TCAGGGCGAGTTTTTTCAGCGGCG	CGCCGCTGAAAAAACTCGCCCTGA
	2687	TTCGTTCTGTCTATTTTTGCCCCG	CGGGGCAAAAATAGACAGAACGAA
	2688	TGGTATGCCCAGGATCCAGCCTAC	GTAGGCTGGATCCTGGGCATACCA
	2689	TCTCAGTCGTTAGGCCAATGGCGG	CCGCCATTGGCCTAACGACTGAGA
	2690	AAAGATCACCGTGGAGCGATCGGC	GCCGATCGCTCCACGGTGATCTTT
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	2692	TGCCCACGGTACCGTTCAAGGCTG	CAGCCTTGAACGGTACCGTGGGCA
	2693	TGAGGTGCGTCGCCTAAGTAATG	CATTACTTAGGGCGACGCACCTCA
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	2699	CGCATCTGCCCCATTTTGTTCCTT	AAGGAACAAAATGGGGCAGATGCG
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	2702	GGGCAAGAACATGAGAACAGACCG	CGGTCTGTTCTCATGTTCTTGCCC

	2703	TCGTCCTGGTACGACTTGCGTAGA	TCTACGCAAGTCGTACCAGGACGA
	2704	TGGCGGTTGCATGTGATGATCAAG	CTTGATCATCACATGCAACCGCCA
	2705	CCTCGCGTGAGTAAAAACCGTCCG	CGGACGGTTTTTACTCACGCGAGG
	2706	ACTTCCGCCACAGAATGCGGCCAG	CTGGCCGCATTCTGTGGCGGAAGT
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	2708	CGCAGCATCCGAGTTAACACACAT	ATGTGTGTTAACTCGGATGCTGCG
	2709	ATGAGCCTGGGATGATCCGCTGGT	ACCAGCGGATCATCCCAGGCTCAT
	2710	CCTGGCATAAGTGCCGACATGCTT	AAGCATGTCGGCACTTATGCCAGG
	2711	GCGCATGAAAAACTACGACGGACG	CGTCCGTCGTAGTTTTTCATGCGC
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	2714	TCACCGCATTTGATAGTTACGCGA	TCGCGTAACTATCAAATGCGGTGA
	2715	TGGTGGAGCGGACTCTGGTGTTAT	ATAACACCAGAGTCCGCTCCACCA
	2716	CACAATGAAAAAACAATGGCCCCA	TGGGCCATTGTTTTTCATTGTG
15	2717	CCTTGCCGCGCTTGTGGTACCAAC	GTTGGTACCACAAGCGCGGCAAGG
	2718	CCGAGACCTTTGCCACACGAAAGA	TCTTTCGTGTGGCAAAGGTCTCGG
	2719	ACCGCGGTGTACACCTGAGCAGGC	GCCTGCTCAGGTGTACACCGCGGT
	2720	GTCGTACGCTTACCGCAGCGGAGA	TCTCCGCTGCGGTAAGCGTACGAC
	2721	TCGTAATTTGACCGACACACGCAG	CTGCGTGTGTCGGTCAAATTACGA
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	2723	AAGCGACAGCAGAGGTTCAGTCGC	GCGACTGAACCTCTGCTGTCGCTT
	2724	GCGTGGACGATATCACCTGGGCGT	ACGCCCAGGTGATATCGTCCACGC
	2725	GTCGGAGAGCCAGTGGTACGGCTT	AAGCCGTACCACTGGCTCTCCGAC
	2726	TATCCGCACGGTATAGCAGTTGCA	TGCAACTGCTATACCGTGCGGATA
25	2727	CATCAGTCGGGCTACCTTCAGCCT	AGGCTGAAGGTAGCCCGACTGATG
	2728	CGGATTAATGCCTTTCCTCGGAAT	ATTCCGAGGAAAGGCATTAATCCG
	2729	TTCGTCGTGCCAAGCTAATGCAAG	CTTGCATTAGCTTGGCACGACGAA
	2730	GGCCGAGACCACCAGTAACAGGTT	AACCTGTTACTGGTGGTCTCGGCC
	2731	CGCGCGAAGCATTGAAGTTACTA	TAGTAACTTCAATGCTTCCGCGCG
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	2733	GACTGACGTCAAGGCAAGCACAC	GTGTTGCTTGCCTTGACGTCAGTC
	2734	AGAGGAAGGAGGGCTGTGACAGA	TCTGTCACAGCCCCTCCTTCCTCT
	2735	TTCCAATGCGAGAGATGGCAGGCT	AGCCTGCCATCTCTCGCATTGGAA
	2736	AAATGGGGTGCTTCGAATATGTCG	CGACATATTCGAAGCACCCCATTT
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•	2738	CCGACTTTGTTTATGTTGCTGGCG	CGCCAGCAACATAAACAAAGTCGG
	2739	GCTGCGATATAACCCGTCCCAGAA	TTCTGGGACGGGTTATATCGCAGC
	2740	TGAGCTGGGCGTCAACTCCGAAGA	TCTTCGGAGTTGACGCCCAGCTCA
	2741	CCCAAGCATCCTAAATCTCCCTCG	CGAGGGAGATTTAGGATGCTTGGG
40	2742	CGACAGCAATCCACATGCATTCTT	AAGAATGCATGTGGATTGCTGTCG
	2743	TGAATGGTCGGGAAACCAATGCAT	ATGCATTGGTTTCCCGACCATTCA

	2744	CTTTGCATCGAGATGCGGGGTAGC	GCTACCCGCATCTCGATGCAAAG
	2745	TCCATTTCCTCCGCAACTCTCAGG	CCTGAGAGTTGCGGAGGAAATGGA
	2746	CCACTACGCCATCCTGACAACGAG	CTCGTTGTCAGGATGGCGTAGTGG
	2747	TAGTAAGGCCAATGTACGCCGTCC	GGACGGCGTACATTGGCCTTACTA
5	2748	GTCATGCATATGGGGCCTGTTTTC	GAAAACAGGCCCCATATGCATGAC
	2749	ACCGGTAGACGTTAGCGGGTTCAA	TTGAACCCGCTAACGTCTACCGGT
	2750	TTGGTTCAAACGGCCACACGTCTC	GAGACGTGTGGCCGTTTGAACCAA
	2751	GACACAAACTGCAAGGGAGGCATG	CATGCCTCCCTTGCAGTTTGTGTC
	2752	CTCGAGCGCTGTCATCATATCGGC	GCCGATATGATGACAGCGCTCGAG
10	2753	GCGGCTAAGGCACAAGTAGACGTG	CACGTCTACTTGTGCCTTAGCCGC
	2754	ACAGCCTAAATGGCGCAAGACCGA	TCGGTCTTGCGCCATTTAGGCTGT
	2755	CCGATGATGTAAGCCGTCGGCCCT	AGGGCCGACGGCTTACATCATCGG
٠	2756	AGGAGCAAACAAACGCCAGTGACA	TGTCACTGGCGTTTGTTTGCTCCT
	2757	ACGAATTGGGTAGCCGGACTGAGA	TCTCAGTCCGGCTACCCAATTCGT
15	2758	CTGTTCCAGTTCGGCAAGTGCGGC	GCCGCACTTGCCGAACTGGAACAG
	2759	AGACAAGTCAGGAACGCGTTTCCG	CGGAAACGCGTTCCTGACTTGTCT
	2760	AGACGACGGCCAGATACGCTGCCA	TGGCAGCGTATCTGGCCGTCGTCT
	2761	AGGAAGCGCTTCTTCCGGTTCTTC	GAAGAACCGGAAGAAGCGCTTCCT
	2762	GATGGACGCAAACACAAGGCGATC	GATCGCCTTGTGTTTGCGTCCATC
20	2763	CGCATAGCAGTCTCCGCATCTTGG	CCAAGATGCGGAGACTGCTATGCG
	2764	TGGTTCCGGTGTGCAACAGATAAA	TTTATCTGTTGCACACCGGAACCA
	2765	CCGTATGCCACCTCCAGAACTCAA	TTGAGTTCTGGAGGTGGCATACGG
	2766	GTAAAGGAACCCCTCGGGAATCCT	AGGATTCCCGAGGGGTTCCTTTAC
	2767	GCCTGATGCTCGTTAAAATTGCGT	ACGCAATTTTAACGAGCATCAGGC
25	2768	TCGCACTTGGACCATGAGATCTGA	TCAGATCTCATGGTCCAAGTGCGA
	2769	TTCTCAGGCTGGGCAAGAGTCTGT	ACAGACTCTTGCCCAGCCTGAGAA
	2770	CGGACCTGGGGATGCTGGGATTAC	GTAATCCCAGCATCCCCAGGTCCG
	2771	TCGAGCCGATAGGGTTGGCATTGC	GCAATGCCAACCCTATCGGCTCGA
	2772	TACGTGTGTCCCACACACGTCGTA	TACGACGTGTGTGGGACACACGTA
30	2773	TGTGAAATTCGCGTTTCGCATCTT	AAGATGCGAAACGCGAATTTCACA
	2774	TTGCAATGCTCCAAAAAAACTGCC	GGCAGTTTTTTTGGAGCATTGCAA
	2775	TCTCATCATGGCTGTGGCTTTGAC	GTCAAAGCCACAGCCATGATGAGA
	2776	ATTACACCGCTTGGTTTGGAGTGG	CCACTCCAAACCAAGCGGTGTAAT
	2777	GCCGTGCAATGCACAGAGTTCAAG	CTTGAACTCTGTGCATTGCACGGC
35	2778	GAGATCAGACCGTGTCGGATGCTG	CAGCATCCGACACGGTCTGATCTC
•	2779	CCACCTATCTTGATGCGACCTGGA	TCCAGGTCGCATCAAGATAGGTGG
	2780	CCGATCGCCGTTTATGTCTACGGC	GCCGTAGACATAAACGGCGATCGG
	2781	GAAAATCACGGTAAGGCACGTTCG	CGAACGTGCCTTACCGTGATTTTC
	2782	GATTCTCGCTTCCCAACGAGCATA	TATGCTCGTTGGGAAGCGAGAATC
40	2783	TGTGAAATGTGGCAGTCTCAGGGA	TCCCTGAGACTGCCACATTTCACA
	2784	CGATCCTGCGTGCCTCATCCAGGC	GCCTGGATGAGGCACGCAGGATCG

	2785	CCCTCAAGTGGGCGAGGGTTTTCA	TGAAAACCCTCGCCCACTTGAGGG
	2786	TCGCCTCGCCTCGTGTGTAGAAG	CTTCTACACACGAGGCGAGGCGA
	2787	TTCGCTTTCAGCTCATTGGAACGA	TCGTTCCAATGAGCTGAAAGCGAA
	2788	TGTAATCTGAACAAGCGGACCCCT	AGGGGTCCGCTTGTTCAGATTACA
5	2789	TGGAATCTTTCTTGAGCGCCGTGA	TCACGGCGCTCAAGAAAGATTCCA
	2790	GGCTTTCATCTTTAACCGCTCGGT	ACCGAGCGGTTAAAGATGAAAGCC
	2791	TGATCCGAGCCATTCCTAATCACC	GGTGATTAGGAATGGCTCGGATCA
	2792	TGGTAGGCGTGATGTCCTACGCAA	TTGCGTAGGACATCACGCCTACCA
	2793	AGGCATCGGTAAGAAGGCCCTATG	CATAGGGCCTTCTTACCGATGCCT
10	2794	CGCCGCGAGACGATCCTTATTATT	AATAATAAGGATCGTCTCGCGGCG
	2795	ACATGGACGAAATTACGCCCGTCA	TGACGGCGTAATTTCGTCCATGT
	2796	ACAGAAAGGTGGGGAGCCTAGCGT	ACGCTAGGCTCCCCACCTTTCTGT
	2797	AGGCTTGCGAACATGGGTAGTGAC	GTCACTACCCATGTTCGCAAGCCT
	2798	GCGTGGGCCTTGCTCCTGTTTAAC	GTTAAACAGGAGCAAGGCCCACGC
15	2799	GAATACAGAGCGTCCGATGTGCCC	GGGCACATCGGACGCTCTGTATTC
	. 2800	GCGACTCTGTAGGGAGCGCGATAT	ATATCGCGCTCCCTACAGAGTCGC
•	2801	GGTGCACTCATATGCGTCGCATCG	CGATGCGACGCATATGAGTGCACC
	2802	CTGTCCCACGGGGAAACCTTACTT	AAGTAAGGTTTCCCCGTGGGACAG
	2803	TGGCTTACTGTCGCAATCTAGGCC	GGCCTAGATTGCGACAGTAAGCCA
20	2804	GCACTCAGTTTCCGGTATCCCATG	CATGGGATACCGGAAACTGAGTGC
	2805	GTGAGGTTCACGTAAGGCACAGCG	CGCTGTGCCTTACGTGAACCTCAC
	2806	GTAACGCCTTTGTCCCCAGCGTAT	ATACGCTGGGGACAAAGGCGTTAC
	2807	GCATTGATATGGTCGGTCTCGCCT	AGGCGAGACCGACCATATCAATGC
	2808	GTGGGTTTAAGTGACAACGGACGC	GCGTCCGTTGTCACTTAAACCCAC
25	2809	CAAAACCCTGCCGAAGATGTTGGT	ACCAACATCTTCGGCAGGGTTTTG
	2810	TCCGAGGAGACTGAACCTGCTACC	GGTAGCAGGTTCAGTCTCCTCGGA
	2811	CGGGGAAGAACGGATTCGCTAAAT	ATTTAGCGAATCCGTTCTTCCCCG
	2812	TGGTTAGCTTATGTCGGAGCCACC	GGTGGCTCCGACATAAGCTAACCA
	2813	ACGCGTCGATGAACTAAGGCTCGC	GCGAGCCTTAGTTCATCGACGCGT
30	2814	TTCTCCTGACGAGTACGCAGTGGG	CCCACTGCGTACTCGTCAGGAGAA
	2815	TCCGCGGTTGCCGGTTTGTTAGGA	TCCTAACAAACCGGCAACCGCGGA
	2816	TGGCGCATCTTTCAGGGGATGATG	CATCATCCCCTGAAAGATGCGCCA
	2817	TCTTTGGTCCTTGGTGTTTACGCG	CGCGTAAACACCAAGGACCAAAGA
	2818	GAGAACTCCCGCTACAAAGGAGCC	GGCTCCTTTGTAGCGGGAGTTCTC
35	2819	TTAACGTGGGAACCGTTGGTGAAT	ATTCACCAACGGTTCCCACGTTAA
	2820	GGGACACCATCCTTGGGTTTGTTA	TAACAAACCCAAGGATGGTGTCCC
	2821	CAACAAACCGCCTTGGGAAGTGAC	GTCACTTCCCAAGGCGGTTTGTTG
	2822	TTGAAGGCCACCGATACTGATCGC	GCGATCAGTATCGGTGGCCTTCAA
ĺ	2823	TCGTAATAGAACTGCGCCCAATGC	GCATTGGGCGCAGTTCTATTACGA
40	2824	GGCACGTTGCCCAAGTTGGATCCA	TGGATCCAACTTGGGCAACGTGCC
[	2825	ACATAGCTTGGCCGGACACCCACC	GGTGGGTGTCCGGCCAAGCTATGT
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2826   CTTGCGCCTTGCGAGTGGCTAAA   TTTAGCCACTCGCAAGGCGGCAAG   2827   AATGGCTGCCAGATACCGCAGCC   GCTTGCGGTATCTTGCGAGCCATTTTCA   2828   CAAAAGGCGTGTCCGAACTTTTCA   TCAAAAGTTCGGACACGCCTTTTG   2829   CGTCCACTTAGTGCAGACACGAC   GGCTGCTCTCACACGACACGCCTTTTG   2830   GAGCCTCTTCGTCCTGAAGACCGA   TCGGTCTTCAGGACAGAGAGGCTC   2831   AACATCAAGCGGCAATCTCCCTTC   GAAGGAGATTGCCGCTTCATGTT   2832   CGTCCTGACATTATTAGCCGTGC   GCACGCGCTAATAATGTCAGACG   2833   TGTGCAGACCCTACGGC   CCGTAGGTCGTTAGGCGCGCACACACACCTCACGA   CCGTAGGTCGTTAGCGCTGCACA   2834   TTAGGTCGGCCTTACGACCCTCCGTA   TACGGAGGGTCTAGCGCCACCTACACCACCCACCCACCACCACCACCACCACCACC				
2828		2826	CTTGCCGCCTTGCGAGTGGCTAAA	TTTAGCCACTCGCAAGGCGGCAAG
2829		2827	AATGGCTCGCCAGATACCGCAGCC	GGCTGCGGTATCTGGCGAGCCATT
5 2830 GAGCCTCTTCGTCCTGAAGACCGA TCGGTCTTCAGGACGAAGAGGCTC 2831 AACATCAAGCGGCAATCTCCCTTC GAAGGGAGATTGCCGCTTGATGTT 2832 CGTCCTGACATTATTAGCGCGTGC GCACGCGCTAATAATGTCAGGACG 2833 TGTGCAGACCCTAACGACCTACGG CCGTAGGTCGTTAAGGTCTGCACA 2834 TTAGGTCGGCCTAGACCCTCCGTA TACGGAGGGTCTAGGCCGCCACCTAA 2835 TCACATCGCTTAACTGAGCCGCATA TACGGAGGGTCTAGGCCGCCACCTAA 2836 AGACCTTCCCACGCGAGATGCTAC GTAGGACCACTTCGCGTGGGAAGGTCT 2837 TTCTTGCCAAAATGTGTCCAACCA TGGTTGACACACACATTTTGCCACACACACATTTTTGCCACACACA		2828	CAAAAGGCGTGTCCGAACTTTTCA	TGAAAAGTTCGGACACGCCTTTTG
2831 AACATCAAGCGGCAATCTCCCTTC GAAGGGAGATTGCCGCTTGATGTT 2832 CGTCCTGACATTATTAGCGCGTGC GCACGCGCTAATAATGTCAGGACG 2833 TGTGCAGACCCTTAAGACCTACGG CCGTAGGTCTTAGGGTCTGCACA 2834 TTAGGTCGGCCTAGACCCTCCGTA TACGGAGGGTCTTAGGCCCGACCTACACACCCCCGTA TACGAGGGTCTTAGGCCCGACCTACCACCCGCACCTACGACCCTCCGTA TACGGAGGGTCTTAGGCCCGACCTACCACCCCGCACCTAGGACCCTCCGTA TACGGAGGGTCTAGGCCCGACCTACCCCCGCTACGACCCCCCGCTAAGCCCTCCGTAACCCACTTAACCGATGTAACCACTACCACCACCCGCAAGACCATTTTGCCACCGAGAAGCAACCCCCCCC		2829	CGTCCACTTAGGTGGAGATACGCC	GGCGTATCTCCACCTAAGTGGACG
2832 CGTCCTGACATTATTAGCGCGTGC 2833 TGTGCAGACCCTAACGACCTACGG 2834 TTAGGTCGGCCTAACCACCTCCGTA 2834 TTAGGTCGGCCTAACCACCTCCGTA 2835 TCACATCGGCCTAACACCTCCGTA ATGCGAGGGTCTAGCGCCTAACACCTCGACACCTAACACCTCGACACCTAACACCTCGACACCTAACACCTCGACACCTAACACCTCGACACCTAACACCTCGACACCTAACACCACCTAACACCACCACCTAACACCACCAC	5	2830	GAGCCTCTTCGTCCTGAAGACCGA	TCGGTCTTCAGGACGAAGAGGCTC
2833 TGTGCAGACCCTAACGACCTACGG CCGTAGGTCGTTAGGGTCTGCACA 2834 TTAGGTCGGCCTAGACCCTCCGTA TACGGAGGGTCTAGGCCGACCTAA 2835 TCACATCGCTTAACTGAGCGCATT AATGCGCTCAGTTAACGGATGTGA 2836 AGACCTTCCCACAGCGAGATGCTAC GTAGCACTCTCGCGTGGGAAGGTCT 2837 TTCTTGCCAAACTGTGTCCAACCA TGGTTGGACACATTTTGGCAAGAA 2838 CAGTTTTCATTGCAGCGAAAGCAA TGGTTGCCAACCATTTTGGCAGCAAAACAA 2838 CAGTTTTCATTGCAGCGAAAGCAA TGGTTGCCAATGAAAACTG 2839 GTGCCGATCCCGAGACAAGTTCCG CGGAACTTGTCTCGGGGATCGCCAC 2840 CATCCGGCCTCAGTGATTCTTACC GGTAAGAATCACTGAGGCCCGATC 2841 TGCTGGAAGCCACAAACGTTACGT ACGTAACGTTTGTGGCTTCCAGCA 2842 GAACGGCCAGAGCAAACGTTACGT ACGTAACGTTTGTGGCTTCCAGCA 2844 TTTGGTTACCAGCACACAACACTTCC GGAACATGTGTCCCTGGCCGTTC 2843 TCATCTAGGTCGAAGCCACAACACTTCC GGAACATGGTGTCTCAGCAAACACACACACACACACACAC		2831	AACATCAAGCGGCAATCTCCCTTC	GAAGGAGATTGCCGCTTGATGTT
2834 TTAGGTCGGCCTAGACCCTCGTA TACGGAGGGTCTAGGCCGACCTAA 2835 TCACATCGCTTAACTGAGCGCATT AATGCGCTCAGTTAAGCGATGTGA 2836 AGACCTTCCCACGCGAGATGCTAC GTAGCATCTGCGGTGGAAAGAGTCT 2837 TTCTTGCCAAAATGTGTCCAACCA TGGTTGGACACATTTTGGCAAGAA 2838 CAGTTTTCATTGCAGCGAAAGCAA TTGCTTTCGCTGCAATGAAAACTG 2839 GTGCCGATCCGAGAGCAAAGTTCCG CGGAACTTGTCTCGGGATCGGCAC 2840 CATCCGGCCTCAGTGATTCTTACC GGTAAGAATCACTGAGGCCGGATG 2841 TGCTGGAAGCCACAAACGTTACGT ACGTAACACTTGTCTCAGCCAAGACACCTTCACCCAAGACACCTTCACCCAAGACACCTTCACCCCACCACCACCACCACCACCACCACCCCCTTCCCCCTGGCCGTTC 2843 TCATCTAGGTCGAAGCGCAAGACA TGTCTTGCCCTGGCCGTTC 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTTCTCAGCCAAGACACCCCCCACATCC GGAACTGGCGGAACACACACCTTTGCCCCCCCCCC		2832	CGTCCTGACATTATTAGCGCGTGC	GCACGCGCTAATAATGTCAGGACG
10 2835 TCACATCGCTTAACTGAGCGCATT AATGCGCTCAGTTAAGCGATGTGA 2836 AGACCTTCCCACGCGAGATGCTAC GTAGCATCTCGCGTGGGAAGGTCT 2837 TTCTTGCCAAAATGTGTCCAACCA TGGTTGGACACATTTTGGCAAGAA 2838 CAGTTTTCATTGCAGCGAAAGCAA TTGCTTTCGCTGCAATGAAAACTG 2839 GTGCCGATCCCGAGACAAGTTCCG CGGAACTTGTCTCGGGATCGGCAC 2840 CATCCGGCCTCAGTGATTCTTACC GGTAAGAATCACTGAGGCCGGATG 2841 TGCTGGAAGCCACAAACGTTACGT ACGTAACACTTTGTCCCGCGATG 2842 GAACGGCCAGAGCCACAACACTTCCT ACGTACACCTTGGCTTCCAGCA 2843 TCATCTAGGTCGAAGCCAAACCTTACGT ACGATACGTTGCCCCTGGCCGTTC 2844 TTTGGTTACCAGCACACACATTCCT GGAACATGGGTGCTGGACCAAAA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGGAACCAAA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGGAACCAAA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGTAACCAAA 2846 GCCAACAGGAGTGCTTGCCCCACATCC GGATGTGGCGGACAGACTGTTGTC 2847 CTAAGGACGCATTGACCCCTGAAC ATGGTGCAAGACATCTCCTTTGGC 2848 GGTCGCGTAGTGAGTCAGAGGCCT ACGCCCTCTGACTCACTTAGGCGACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAAGGGTTCATGAGGACA 2850 TATACAGCATCGCCCCTGAAC ATGCCCTCTGACTCACTACGCGACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAAGGGTTCATGAGGACA 2851 GCTTAGTGAGCTCCACTCATA TATGCCCCGGACCATTAGGCTAA 2851 GCTTAGTGGCGTCTCGCCGGGC CGCCCGCAAAGGGTTCATGAGGAACACCCTTAGAC 2852 TGCACTCCCCAACCTTTGTGAAATC CATTCACAAGGTTGCGGAGTGCA 2853 AACCCGTCATGCGACCTCCATCA TAGATGAGTCGGCATGACGGGT 2854 AGCACTAGTGCGACTCCATCA TAGATGAGTCGGACACACTAGCCACCACTAAGC 2855 TAAAAAGTGCCGCTACCACTCCATTC GAATCGACGACACAATATTCCCGCG 2857 TTCTGCTATGCGGACCCCCCCCCCCCCCCCATACGCCACTAAGCACACACA		2833	TGTGCAGACCCTAACGACCTACGG	CCGTAGGTCGTTAGGGTCTGCACA
2836 AGACCTICCCACGCGAGATGCTAC GTAGCATCTCGCGTGGGAAGGTCT 2837 TTCTTGCCAAAATGTGTCCAACCA TGGTTGGACCACTTTTGGCAAGAA 2838 CAGTTTCATTGCAGCGAAAGCAA TTGCTTTCGCTGCAATGAAAACTG 2839 GTGCCGATCCCGAGACAAGTTCCG CGGAACTTGTCTCGGGATCGGCAC 2840 CATCCGGCCTCAGTGATTCTTACC GGTAAGAATCACTGAGGCCGGATC 2841 TGCTGGAAGCCACAAACGTTACGT ACGTAACACTTTGTCCAGCA 2842 GAACGGCCAGGGACAACTTCCGT ACGTAAGAATCACTGAGGCCGGATC 2843 TCATCTAGGTCGAAGCGCAAGACA TGTCTTGCGCTTCCAGCAC 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGCACCTAGATGA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGGACCTAGATGA 2846 GACAACAGTGTGTCCGCACATTCC GGAACATGGGTGCTGTAACCAAA 2847 CTAAGGACGCAGAGATGCTTGCACCAT ATGGTGCAAGCATCCTTTGGC 2848 GGTCGCGTAGTGAGTCCACCACT ATGGTGCAAGCATCCTTTGGC 2849 TTACCTCATGAACCCCTCGACC GTTCAGAGGAGACACTCTCTGTGCGCACCTAGACCACTAGACCACTAGACCACTAGACCACTAGACCACTAGACCACTAGACCACTAGACCACTAGACCACTAGACCACACACA		2834	TTAGGTCGGCCTAGACCCTCCGTA	TACGGAGGGTCTAGGCCGACCTAA
2837 TTCTTGCCAAAATGTGTCCAACCA TGGTTGGACACATTTTGGCAAGAA 2838 CAGTTTTCATTGCAGCGAAAGCAA TTGCTTTCGCTGCAATGAAAACTG 2839 GTGCCGATCCCGAGACAAGTTCCG CGGAACTTGTCTCGGGATCGGCAC 2840 CATCCGGCCTCAGTGATTCTTACC GGTAAGAATCACTGAGGCCGGATG 2841 TGCTGGAAGCCACAAACCTTACGT ACGTAAGAATCACTGAGGCCGGATG 2842 GAACGGCCAGGGGAACAATCTCT ACGATAGTTTGTCCCTGGCCGTTC 2843 TCATCTAGGTCGAAGCACAACTATCGT ACGATAGTTTGTCCCTGGCCGTTC 2844 TTTGGTTACCAGCACCACATCCT GGAACATGGGTCGACCACAAACAGCACAACATGTTCC GGAACATGGGTGCTGGACCAAAA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGGACCAAAA 2845 GACAACAGTCTGTCCGCCACATCC GGATGGGCGGACAGACTGTTGTC 2846 GCCAACAGGAGTGCTTGCACCAT ATGGTGCAAGCATCTCTGTTGGC 2847 CTAAGGACGCATTGACCCCTGAAC GTTCAGGGGTCAATGCGTCCTTAG 2848 GGTCGCGTAGTGAGTCAGAGGCGT ACGCCTCTGACTCACTACGCGACC 2849 TTACCTCATGAACCCTTCGCGGGC CGCCGCGAAGGGTTCATGAGGTAA 2851 GCTTAGTGGCGTCTTCGCGGGC CGCCGCGAAGAGCACCACTAAGC 2852 TGCACTCCGCAACCTTTGCTGCGGC CCCCGGACGAAGACCCCACTAAGC 2853 AACCCGTCATGCCGACCTTA TATGCCCCGGCACCATGCTGTATA 2851 GCTTAGTGGCGTCTTCGTCGTAGG CCTACGACGAAGACCCCACTAAGC 2852 TGCACTCCGCAACCTTTGTGAAATC ATTTGCACAAGGTTGCGGATGAA 2853 AACCCGTCATGCCGACTTCAT TAGATTGGCACGACGCACATAGTGCT 2854 AGCACTAGTGGCGACTTCCTCC GCAAAGTCGCACCACTAAGC 2855 TAAAAAGTGCCGCTCCATCTA TAGATGGAGTTGCGGATGACAGCC 2857 TTCTGCTATGCCGACTTCCC GGGCCCCCATACGACACACACACACCCCCCATACCACACACA	10	2835	TCACATCGCTTAACTGAGCGCATT	AATGCGCTCAGTTAAGCGATGTGA
2838 CAGTTTCATTGCAGCGAAAGCAA TTGCTTTCGCTGCAATGAAAACTG 2839 GTGCCGATCCCGAGACAAGTTCCG CGGAACTTGTCTCGGGATCGGCAC 2840 CATCCGGCCTCAGTGATTCTTACC GGTAAGAATCACTGAGGCCGGATC 2841 TGCTGGAAGCCACAAACGTTACGT ACGTAACGTTTGTGCGCTTCCAGCA 2842 GAACGGCCAGGGGACAACTATCGT ACGATAGTTGTCCCCTGGCCGTTC 2843 TCATCTAGGTCGAAGCGCAAGACA TGTCTTGCGCTTCGACCTAGATGA 2844 TTTGGTTACCAGCACCCCATGTTCC GGAACATGGGTGCTGGTAACCAAA 2845 GACAACAGTCTGCCGCCACATCC GGAACATGGGTGCTGGTAACCAAA 2846 GCCAACAGGAGTTGCACCAT ATGGTGCAAGCATCGTTGTC 2847 CTAAGGACGCATTGACCCTT ATGGTGCAAGCATCCTTTTGC 2848 GGTCGCGTAGTGACCCTGAAC GTTCAGGGGTCATTAGCGCACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCAACGACTCTTAG 2851 GCTTAGTGCCCTGAAC TATGCCCCGCACATCC 2852 TGCACTCCGCACATC CGCGGCACATCACCACCACCACCACCACCACCACCACCACCACCA		2836	AGACCTTCCCACGCGAGATGCTAC	GTAGCATCTCGCGTGGGAAGGTCT
2839 GTGCCGATCCCGAGACAAGTTCCG CGGAACTTGTCTCGGGATCGGCAC 2840 CATCCGGCCTCAGTGATTCTTACC GGTAAGAATCACTGAGGCCGGATG 2841 TGCTGGAAGCCACAAACGTTACGT ACGTAACGTTTGTGCTTCCAGCA 2842 GAACGGCCAGGGGACAACTATCGT ACGATAGTTGTCCCCTGGCCGTTC 2843 TCATCTAGGTCGAAGCGCAAGACA TGTCTTGCGCTTCGACCTAGATGA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGTGGTGGTAACCAAA 2845 GACAACAGTCTGTCCGCCACATCC GGATGTGGCGGACAAGACTGTTGTC 2846 GCCAACAGGAGATGCTTGCACCAT ATGGTGCAAGCATCTCCTTTGGC 2847 CTAAGGACGCATTGACCCTGAAC GTTCAGGGGTCATAGCGTCCTTAG 2848 GGTCGCGTAGTGACCCTGAAC GTTCAGGGGTCAATGCGTCCTTAG 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGTAA 2850 TATACAGCATCGTCGCCGGGCT ACGCCTCTGACTCACTACGGCGACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGTAA 2851 GCTTAGTGGCGTCTTCGTCGTAGG CTACGACAGAAGACGCCACTAAGC 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGCACC 2853 AACCCGTCATGCCGACCTCCATCTA TAGATGGAGTCGACGACGACACACCTAGGC 2854 AGCACTAGTGCGCGACCTCCATCTA TAGATGGAGTCGCACGCACTAAGC 2855 TAAAAAGTGCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGGACGATGACGGTT 2854 AGCACTAGTGGCGTGCACTTTTGC GCAAAGTCGCACGCCACTAGTGCT 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACCACTAGTGCT 2856 CGCGGAATATTTTGTCTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCCGATCCCCCCCCCCCCCATACCGCCACTTTTTA 2856 CGCGGAATATTTTGTCGCGCCCC CGGGCCCCCCATACCGCAACAAA 2858 CGAACTACTGCGTCAGCCCTCCCC GGGAGGCTGACGCAGATGTTCT 2859 AGATGACGAATTAGCGGGGTTGGG CCCACCCCGCTAATTCGTCATCT 2859 AGATGACGAATTAGCGGGGTTGGG CCCACCCCGCTAATTCGTCATCT 2861 ATATGTTGATTCCCGTGCTCACA TGTGCACCCCGCTAATTCGTCATCT 2862 AGAGTGGGCACCACCAGGCAGACA TGCCCGGCACCCCCTTAATCCCACTCT 2863 AGGCCTGGGTTTCTCGCTCTTAGT ACTAGACCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACAATCCCC GGGTTTGTCACCCCCCCCCTTAATTCGTCATCT 2863 AGGCCTGGGTTTCTGCCGTCTTAGT ACTAGACCAAAACCCAGGCCT 2864 CGGACGTGACAAACGGACAATCCCC GGGTATTTCCCCGTTTGTCACCCCCCCCCTTTTGTCACCCCCCCC		2837	TTCTTGCCAAAATGTGTCCAACCA	TGGTTGGACACATTTTGGCAAGAA
15 2840 CATCCGGCCTCAGTGATTCTTACC GGTAAGAATCACTGAGGCCGGATG 2841 TGCTGGAAGCCACAAACGTTACGT ACGTAACGTTTGTGGCTTCCAGCA 2842 GAACGGCCAGGGGACAACTATCGT ACGATAGTTGTCCCCTGGCCGTTC 2843 TCATCTAGGTCGAAGCGCAAGACA TGTCTTGCGCTTCGACCTAGATGA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGTGCTGGTAACCAAA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGGTAACCAAA 2845 GACAACAGTCTGTCCGCCACATCC GGATGTGGCGGACAGACTGTTGTC 2846 GCCAACAGGAGATGCTTGCACCAT ATGGTGCAAGCATCTCTGTTGGC 2847 CTAAGGACGCATTGACCCCTGAAC GTTCAGGGGTCAATGCGTCCTTAG 2848 GGTCGCGTAGTGACCCCTGAAC GTTCAGGGGTCAATGCGTCCTTAG 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGTAA 2850 TATACAGCATCGTCGCCGGGCATA TATGCCCGGGCACCACTAAGC 2851 GCTTAGTGGCGTCTTCGTCGTAGG CCTACGACGACACACACACACCACCACACCA		2838	CAGTTTTCATTGCAGCGAAAGCAA	TTGCTTTCGCTGCAATGAAAACTG
2841 TGCTGGAAGCCACAAACGTTACGT ACGTAACGTTTGTGGCTTCCAGCA 2842 GAACGGCCAGGGGACAACTATCGT ACGATAGTTGTCCCCTGGCCGTTC 2843 TCATCTAGGTCGAAGCGCAAGACA TGTCTTGCGCTTCGACCTAGATGA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGGTAACCAAA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGGTAACCAAA 2845 GACAACAGTCTGTCCGCCCACATCC GGATGTGGCGGACAGACTGTTGTC 2846 GCCAACAGGAGATGCTTGCACCAT ATGGTGCAAGCATCTCCTGTTGGC 2847 CTAAGGACGCATTGACCCCTGAAC GTTCAGGGGTCAATGCGTCCTTAG 2848 GGTCGCGTAGTGAGTCAGAGGCGT ACGCCTCTGACTCACTACGCGACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGTAA 2851 GCTTAGTGGCGTCTCGCCGGGCATA TATGCCCGGCGACCGACCACTAGCCCACCTTCGCTGCCACCTTTCGTCGTAGG 2852 TGCACTCCGCAACCTTGTGAAATC CATTCACAAGCGCCACTAAGC 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTGCGCATGACGACA 2854 AGCACTAGTGCCGACTCCATCTA TAGATGGAGTGCGCACGCACTAGGCT 2855 TAAAAAGTGCCGCTGCACCTTTCCCCGAACCTCGCGCACCACCTTGTTAA 2856 CGCGGAATATTTGTCGTCGCAGTC CAAAGTCGCACCACCACCATAGCCCACCACCTTGTCCCAACCACCGGAC 2857 TTCTGCTATGCGTACCACGAGA CTCCGTGGTTAGCGGCACTACCACGAA 2858 CGAACTACTGCGTCAGCCTCCCC GGGCCCCCATACGCATAGCCGAA 2858 CGAACTACTGCGTCAGCCTCCCC GGGACCACCACCACTATTCGCAACCACGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGACAGACAAATATTCCGCG 2857 TTCTGCTATGCGTATGGGGGCCCC CGGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGACAGCACAATATTCCGCGC 2859 AGATGACGAATTAGCGGGGTTTGGG CCCAACCCCCGCTAATTCGTCATCT 2861 ATATGTTGATTCCCGTGCACA TGTCCACCCGCTCATTTCCTATTT 2861 ATATGTTGATTCCCGTCGCACA TGTCCACCCGCTAATTCGTCATCT 2862 AGAGTGGCACCACCACGGGAACA TTCCCCGCTCATTTCCCACTGTTATT 2863 AGCCTGGGTTTCTGCGCTCTAGT ACTAGACACACAGGACA 40 CGGACGTGACAAACGGACAACCCCGGCAAACCCCAGGCCT 2864 CGGACGTGACAAACGGACAATCCC GGGTATGTCCGTTTGTCACCTCCG 2864 CGGACGTGACAAACGGACAACCCCGGCCAACCCCGGCAAACCCCAGGCCT 2865 CAAGTGTTTCGGCCCAACTCTCAACCCGGGGAAACCCCAGGCCT 2864 CGGACGTGACAAACGGACAACCCCGGCCAACCCCGGCAAACCCCAGGCCACCCCGGCAAACCCCAGGCCT 2864 CGGACGTGACAAACGGACAACCCCGGCCTTCCCAACCCCGGCAAACCCCAGGCCTCCAACCCCGGCAAACCCCAGGCCCTCCAACCCCGGCAAACCCCAGGCCTCCAACCCCGGCAAACCCCAGGCCTCCAACCCCGGCAAACCCCAGGCCTCCAACCCCGGCAAACCCCGGCCTTAATTCGCACCCCACCCA		2839	GTGCCGATCCCGAGACAAGTTCCG	CGGAACTTGTCTCGGGATCGGCAC
2842 GAACGGCCAGGGGACAACTATCGT ACGATAGTTGTCCCCTGGCCGTTC 2843 TCATCTAGGTCGAAGCGCAAGACA TGTCTTGCGCTTCGACCTAGATGA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGTGCTGGTAACCAAA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGTGCTGGTAACCAAA 2845 GACAACAGTCTGTCCGCCACATCC GGATGTGGCGGACAGACTGTTGTC 2846 GCCAACAGGAGATGCTTGCACCAT ATGGTGCAAGCATCTCCTGTTGGC 2847 CTAAGGACGCATTGACCCCTGAAC GTTCAGGGGTCAATGCGTCCTTAG 2848 GGTCGCGTAGTGAGTCAGAGGCGT ACGCCTCTGACTCACTACGCGACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGTAA 2851 GCTTAGTGGCGTCTCGCGGGCG CGCCGCGAAGGGTTCATGAGGTAA 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGACCACCACCACCACCACCACCACCACCACCACCACCA	15	2840	CATCCGGCCTCAGTGATTCTTACC	GGTAAGAATCACTGAGGCCGGATG
2843 TCATCTAGGTCGAAGCGCAAGACA TGTCTTGCGCTTCGACCTAGATGA 2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGGTAACCAAA 2845 GACAACAGTCTGTCCGCCACATCC GGAACATGGCGGACAGACTGTTGTC 2846 GCCAACAGGAGATGCTTGCACCAT ATGGTGCAAGCATCTCCTGTTGGC 2847 CTAAGGACGCATTGACCCCTGAAC GTTCAGGGGGTCAATGCGTCCTTAG 2848 GGTCGCGTAGTGAGTCAGAGGCGT ACGCCTCTGACTCACTACGCGACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGGTAA 25 2850 TATACAGCATCGTCGCCGGGCATA TATGCCCGGACGACGATGCTGTATA 2851 GCTTAGTGGCGTCTTCGTCGTAGG CCTACGACGAAGACGCCACTAAGC 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGAGTGCA 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGCACTGAGCAGAACACCTAGTGCT 2854 AGCACTAGTGGCGTGCGACTTTTCC GCAAAGTCGCACGCACTAGTGCT 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTAGTGCT 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTATGGGGGCCCG CGGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGGTTGGG CCCAACCCCCGCTAATTCGTCATCT 2861 ATATGTTGATTCCCGTGCACA TGTGCAGCACACGGAATCACACATAT 2862 AGAGTGGCACCACCACGGAAACACTTTC 2863 AGGCCTGGGTTTCTCCCGTCTCCC GGGAACACACGGGAATCAACATAT 2864 CGGACGTGACAAACGGACAA TGTCTCCCTGGTGTGTCCCACTCT 2863 AGGCCTGGGTTTCTCGCGTCTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACAATTCCCGGTTTTTTAACCACCAGGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACAATCCC GGGTATGTCCGTTTTTCCCGCG CGGGCCCCCATACCCCGCTAATTCCTCTCCCCGTGTGTGT		2841	TGCTGGAAGCCACAAACGTTACGT	ACGTAACGTTTGTGGCTTCCAGCA
2844 TTTGGTTACCAGCACCCATGTTCC GGAACATGGGTGCTGGTAACCAAA 2845 GACAACAGTCTGTCCGCCACATCC GGATGTGGCGGACAGACTGTTGTC 2846 GCCAACAGGAGATGCTTGCACCAT ATGGTGCAAGCATCTCCTGTTGGC 2847 CTAAGGACGCATTGACCCCTGAAC GTTCAGGGGTCAATGCGTCCTTAG 2848 GGTCGCGTAGTGAGTCAGAGGCGT ACGCCTCTGACTCACTACGCGACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGTAA 2850 TATACAGCATCGTCGCCGGGCATA TATGCCCGGCGACGATGCTGTATA 2851 GCTTAGTGGCGTCTTCGTCGTAGG CCTACGACGACACACACACACACACACACACACCTTAGTAAATC GATTTCACAAGGATGCCACACAAGCCCACTAAGC 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGAGTGCA 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGCACTGACGGGTT 2854 AGCACTAGTGCGGTGCGACTTTGC GCAAAGTCGCACGCACTAGTGCT 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTTATTA 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTAGCGGCCCC CGGGCCCCCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACCAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCTCT 35 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTTGTTATT 2861 ATATGTTGATTCCGTCTGCACA TGTGCAGCACACACTGTTATT 2862 AGAGTGGCACCACCACACACACACACACACCACGCACACACCACTACTCACCACCACCACCACCACCACCACCA		2842	GAACGGCCAGGGGACAACTATCGT	ACGATAGTTGTCCCCTGGCCGTTC
2845 GACAACAGTCTGTCCGCCACATCC GGATGTGGCGGACAGACTGTTGTC 2846 GCCAACAGGAGATGCTTGCACCAT ATGGTGCAAGCATCTCCTGTTGGC 2847 CTAAGGACGCATTGACCCCTGAAC GTTCAGGGGTCAATGCGTCCTTAG 2848 GGTCGCGTAGTGAGTCAGAGGCGT ACGCCTCTGACTCACTACGCGACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCAAGGGTTCATGAGGTAA 2850 TATACAGCATCGTCGCCGGGCATA TATGCCCGGCACGATGCTGTATA 2851 GCTTAGTGGCGTCTTCGTCGTAGG CCTACGACGACACACTAAGC 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGGATGCA 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGCATGACGGTT 2854 AGCACTAGTGGCGTCCACCATCTA TAGATGGAGTCGCATGACGGGTT 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTAGTGCT 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTCAGCCTCCCCCGCACCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACCAGAAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACCACATAGTTCG 2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCTCT 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTTCATT		2843	TCATCTAGGTCGAAGCGCAAGACA	TGTCTTGCGCTTCGACCTAGATGA
2846 GCCAACAGGAGATGCTTGCACCAT ATGGTGCAAGCATCTCCTGTTGGC 2847 CTAAGGACGCATTGACCCCTGAAC GTTCAGGGGTCAATGCGTCCTTAG 2848 GGTCGCGTAGTGAGTCAGAGGCGT ACGCCTCTACCTACCCACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGTAA 25 2850 TATACAGCATCGTCGCCGGGCATA TATGCCCGGCGACGATGCTGTATA 2851 GCTTAGTGGCGTCTTCGTCGTAGG CCTACGACGAAGACGCCACTAAGC 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGGAGTGCA 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGGCATGACGGGTT 2854 AGCACTAGTGGCGACTTCCATCTA TAGATGGAGTCGGCACTAGTGCT 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTAGTGCT 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTCAGCCTCCC GGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 35 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTTCCACTGTTATT 2861 ATATGTTGATTCCCGTGCTGACA TGTGCACCACGGGAATCAACATAT 2862 AGAGTGGCACCACCACGAGCA TGTCCGCTCTGCTCGCACGCACACACTCTCTCCCACGGAACCACACACCCCGCTAATTCGTCATCT 2863 AGGCCTGGGTTTCTGCGTCTAGT ACTAAGACGCAGAAACCACAGGCCT 2864 CGGACGTGACAAACGGACAACCCCGGCTTTTTTCACCGTCCGCTCACGCACACCCCGCTAATTCCTCCCCCCCC		2844	TTTGGTTACCAGCACCCATGTTCC	GGAACATGGGTGCTGGTAACCAAA
2847 CTAAGGACGCATTGACCCCTGAAC 2848 GGTCGCGTAGTGAGTCAGAGGCGT ACGCCTCTACTCACTACGCGACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGTAA 2850 TATACAGCATCGTCGCCGGGCATA TATGCCCGGCGACGATGCTGATA 2851 GCTTAGTGGCGTCTCGTCGTAGG CCTACGACGACGCACTAAGC 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGGAGTGCA 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGGCATGACGGGTT 2854 AGCACTAGTGGCGTGCGACTTTGC GCAAAGTCGCACCACTAGTGCT 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTATTTA 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTAGGGGCCCG CGGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGAAATATTCGCGCG 2859 AGATGACGAATTAGCGGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 35 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGGCTCATTTCTCT 2861 ATATGTTGATTCCCGTGCACA TGTGCACTGTTATT 2862 AGAGTGGCACCACCACGGAGAC TGTCTGCCTGTGTGTATT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACCGGACAATACCCGGCTTTTTCCACCTCTTCCCCCGGGAAACCCCGCTAGTTCCCCCGCTAATTCCGCCCCCCCACCCCCCCC	20	2845	GACAACAGTCTGTCCGCCACATCC	GGATGTGGCGGACAGACTGTTGTC
2848 GGTCGCGTAGTGAGTCAGAGGCGT ACGCCTCTGACTCACTACGCGACC 2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGTAA 2850 TATACAGCATCGTCGCCGGGCATA TATGCCCGGCGACGATGCTGTATA 2851 GCTTAGTGGCGTCTTCGTCGTAGG CCTACGACGAAGACGCCACTAAGC 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGGAGTGCA 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGGCATGACGGGTT 2854 AGCACTAGTGGCGTGCGACTTTGC GCAAAGTCGCACCACTAGTGCT 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTTTTTA 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTAGCGGCCCC CGGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 2861 ATATGTTGATTCCCGTGCACA TGTGCAGCACGGAATCAACATAT 2862 AGAGTGGCAACCACCAGGCAGAA TGTCTGCCTCGTTGTTATT 2863 AGGCCTGGGTTTCTGCGTCTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACCGACAATACCC GGGTATGTCCGTTTTTCCGCTCCG 2865 CAAGTGTTTCGCGCCCAACTCTCGA TCGAGAGTTGCCCCGCTAATCCCCCGCTAATCCCACTCTT 2864 CGGACGTGACAAACCGACAATACCC GGGTATGTCCCGTTTGTCACCTCCG 2865 CAAGTGTTTCGCCCCAACCTCTCCA TCGAGAGTTGCCCCACACCCCGCTAATCCCCCCGCTAATCCCCCCCC		2846	GCCAACAGGAGATGCTTGCACCAT	ATGGTGCAAGCATCTCCTGTTGGC
2849 TTACCTCATGAACCCTTCGCGGCG CGCCGCGAAGGGTTCATGAGGTAA 2850 TATACAGCATCGTCGCCGGGCATA TATGCCCGGCGACGATGCTGTATA 2851 GCTTAGTGGCGTCTTCGTCGTAGG CCTACGACGAAGACGCCACTAAGC 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGGAGTGCA 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGCATGACGGGTT 2854 AGCACTAGTGGCGTCCCATCTA TAGATGGAGTCGCACGCACTAGTGCT 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTTTTTA 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTATGGGGGCCCG CGGGCCCCCATAGCAGGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT 2861 ATATGTTGATTCCCGTGCTGCACA TGTGCACCACTGTTATT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACAACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTCCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2847	CTAAGGACGCATTGACCCCTGAAC	GTTCAGGGGTCAATGCGTCCTTAG
2850 TATACAGCATCGTCGCCGGGCATA TATGCCCGGCGACGATGCTGTATA 2851 GCTTAGTGGCGTCTTCGTCGTAGG CCTACGACGAAGACGCCACTAAGC 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGGAGTGCA 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGGCATGACGGGTT 2854 AGCACTAGTGGCGTGCGACTTTGC GCAAAGTCGCACGCACTAGTGCT 30 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTATTTA 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTATGGGGGCCCG CGGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 35 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT 2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCTCCTGGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACCCTGGCAACCCCGCAACCCCGCTAATTCGTCACTTGCACCTTTTTTCGCACCTTTTTTCACGTCCACCTCTCCCCCACCCA		2848	GGTCGCGTAGTGAGTCAGAGGCGT	ACGCCTCTGACTCACTACGCGACC
2851 GCTTAGTGGCGTCTTCGTCGTAGG CCTACGACGAAGACGCCACTAAGC 2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGGAGTGCA 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGGCATGACGGGTT 2854 AGCACTAGTGGCGTGCGACTTTGC GCAAAGTCGCACGCCACTAGTGCT 30 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTTTTTA 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGAAATATTCCGCG 2857 TTCTGCTATGCGTATGGGGGCCCG CGGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 2861 ATATGTTGATTCCCGTGCTGCACA TGTCCACCTGTTATT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCGCCTCGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCCAACTCTCGA TCGAGAGTTGGGCCGAAACCCTTG		2849	TTACCTCATGAACCCTTCGCGGCG	CGCCGCGAAGGGTTCATGAGGTAA
2852 TGCACTCCGCAACCTTGTGAAATC GATTTCACAAGGTTGCGGAGTGCA 2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGGCATGACGGGTT 2854 AGCACTAGTGGCGTGCGACTTTGC GCAAAGTCGCACGCCACTAGTGCT 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTTTTTA 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTATGGGGGCCCG CGGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT 2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATCCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG	25	2850	TATACAGCATCGTCGCCGGGCATA	TATGCCCGGCGACGATGCTGTATA
2853 AACCCGTCATGCCGACTCCATCTA TAGATGGAGTCGGCATGACGGGTT 2854 AGCACTAGTGGCGTGCGACTTTGC GCAAAGTCGCACGCCACTAGTGCT 30 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTTTTTA 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTATGGGGGCCCG CGGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT 2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2851	GCTTAGTGGCGTCTTCGTCGTAGG	CCTACGACGAAGACGCCACTAAGC
2854 AGCACTAGTGGCGTGCGACTTTGC GCAAAGTCGCACGCCACTAGTGCT  2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTTTTTA  2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG  2857 TTCTGCTATGCGTATGGGGGCCCG CGGGCCCCCATACGCATAGCAGAA  2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG  2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT  2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT  2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT  2862 AGAGTGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT  2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT  2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG  40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2852	TGCACTCCGCAACCTTGTGAAATC	GATTTCACAAGGTTGCGGAGTGCA
30 2855 TAAAAAGTGCCGCTAACCACGGAG CTCCGTGGTTAGCGGCACTTTTTA 2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTATGGGGGCCCG CGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT 2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2853	AACCCGTCATGCCGACTCCATCTA	TAGATGGAGTCGGCATGACGGGTT
2856 CGCGGAATATTTGTCGTCCGATTC GAATCGGACGACAAATATTCCGCG 2857 TTCTGCTATGCGTATGGGGGCCCG CGGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT 2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2854	AGCACTAGTGGCGTGCGACTTTGC	GCAAAGTCGCACGCCACTAGTGCT
2857 TTCTGCTATGCGTATGGGGGCCCG CGGGCCCCCATACGCATAGCAGAA 2858 CGAACTACTGCGTCAGCCTCTCCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT  2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT 2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG	30	2855	TAAAAAGTGCCGCTAACCACGGAG	CTCCGTGGTTAGCGGCACTTTTTA
2858 CGAACTACTGCGTCAGCCTCTCC GGGAGAGGCTGACGCAGTAGTTCG 2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT 2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2856	CGCGGAATATTTGTCGTCCGATTC	GAATCGGACGACAAATATTCCGCG
2859 AGATGACGAATTAGCGGGGTTGGG CCCAACCCCGCTAATTCGTCATCT 2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT 2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2857	TTCTGCTATGCGTATGGGGGCCCG	CGGGCCCCATACGCATAGCAGAA
2860 AATAACAGTGGCAATGAGCGGGAA TTCCCGCTCATTGCCACTGTTATT  2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT  2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT  2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT  2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG  40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2858	CGAACTACTGCGTCAGCCTCTCCC	GGGAGAGGCTGACGCAGTAGTTCG
2861 ATATGTTGATTCCCGTGCTGCACA TGTGCAGCACGGGAATCAACATAT 2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2859	AGATGACGAATTAGCGGGGTTGGG	CCCAACCCCGCTAATTCGTCATCT
2862 AGAGTGGGCACCACCAGGCAGACA TGTCTGCCTGGTGGTGCCCACTCT 2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG	35	2860	AATAACAGTGGCAATGAGCGGGAA	TTCCCGCTCATTGCCACTGTTATT
2863 AGGCCTGGGTTTCTGCGTCTTAGT ACTAAGACGCAGAAACCCAGGCCT 2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG	-	2861	ATATGTTGATTCCCGTGCTGCACA	TGTGCAGCACGGGAATCAACATAT
2864 CGGACGTGACAAACGGACATACCC GGGTATGTCCGTTTGTCACGTCCG 40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2862	AGAGTGGGCACCACCAGGCAGACA	TGTCTGCCTGGTGGTGCCCACTCT
40 2865 CAAGTGTTTCGGCCCAACTCTCGA TCGAGAGTTGGGCCGAAACACTTG		2863	AGGCCTGGGTTTCTGCGTCTTAGT	ACTAAGACGCAGAAACCCAGGCCT
		2864	CGGACGTGACAAACGGACATACCC	GGGTATGTCCGTTTGTCACGTCCG
2866 GAACCCTTATCGGGATAGGCCCAA TTGGGCCTATCCCGATAAGGGTTC	40	2865	CAAGTGTTTCGGCCCAACTCTCGA	TCGAGAGTTGGGCCGAAACACTTG
		2866	GAACCCTTATCGGGATAGGCCCAA	TTGGGCCTATCCCGATAAGGGTTC

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	2867	CAGGACGATACCAAGCAGAACGCC	GGCGTTCTGCTTGGTATCGTCCTG
	2868	GCGTCTTGTGATTCTGCCCTAACC	GGTTAGGGCAGAATCACAAGACGC
	2869	AAACAACCATCAATGTCGGGTCCA	TGGACCCGACATTGATGGTTGTTT
	2870	TGTAAAGACCAGTTGGCGGCTCTC	GAGAGCCGCCAACTGGTCTTTACA
5	2871	GCGTTTTGACTCGGTGGTCAGTCC	GGACTGACCACCGAGTCAAAACGC
	2872	TGTATGGAGGCACGGCAAAGTCTT	AAGACTTTGCCGTGCCTCCATACA
	2873	TTACCTAGGTTCCCGCTGACACGC	GCGTGTCAGCGGGAACCTAGGTAA
	2874	CGGCTCGTGGGAATCCTCTGAAGA	TCTTCAGAGGATTCCCACGAGCCG
	2875	CCGGCTCGGGCATTTCTTGGACCT	AGGTCCAAGAAATGCCCGAGCCGG
10	2876	CAACGATGGAATTGTCTCCTTGGG	CCCAAGGAGACAATTCCATCGTTG
	2877	CGGGCTATTATCGGGATTATGGGG	CCCCATAATCCCGATAATAGCCCG
	2878	ACGTACCTGAAGATGCAACGGCGG	CCGCCGTTGCATCTTCAGGTACGT
	2879	CATGGTGCAGCACGCACAAGTAAC	GTTACTTGTGCGTGCTGCACCATG
	2880	CGTCGATATGTCGGGCTATTGCCT	AGGCAATAGCCCGACATATCGACG
15	2881	AAATGCAGGGTTAAGAGGAGGCCC	GGGCCTCCTCTTAACCCTGCATTT
	2882	TGCAAGGACTGATTCTCCCGCTGT	ACAGCGGGAGAATCAGTCCTTGCA
	2883	GTTTTCGGAACGCCGCAGAGTTCA	TGAACTCTGCGGCGTTCCGAAAAC
	2884	CCCTCGATGGTTCATTGGGAAGAC	GTCTTCCCAATGAACCATCGAGGG
	2885	CCTGTTCGCTCATAATGGTGGGGT	ACCCCACCATTATGAGCGAACAGG
20	2886	GAAAGAACGATCGCGGAATAGCTG	CAGCTATTCCGCGATCGTTCTTTC
	2887	TCCACCTGTGTGCCTTTATCCTCA	TGAGGATAAAGGCACACAGGTGGA
	2888	TCCTCCGTGAACCGCTGTAGCGCA	TGCGCTACAGCGGTTCACGGAGGA
	2889	TTGAGATTTTTACGGTTTCCCCGC	GCGGGAAACCGTAAAAATCTCAA
	2890	CGATAGGACGTGGGCATGTCCCAG	CTGGGACATGCCCACGTCCTATCG
25	2891	CCCGAACTTTGAGATCCGAGAACA	TGTTCTCGGATCTCAAAGTTCGGG
	2892	TCACGCAGCTAGAGTCGCGTTACC	GGTAACGCGACTCTAGCTGCGTGA
	2893	AGATAACGCCCACTGACGACATGC	GCATGTCGTCAGTGGGCGTTATCT
	2894	ACGCTTAGAGCTCCGATGCCGAAT	ATTCGGCATCGGAGCTCTAAGCGT
	2895	GGGCGATAACTTAAATTGTGCCGC	GCGGCACAATTTAAGTTATCGCCC
30	2896	AGGACGTTCATGCGTCTCTTTGCA	TGCAAAGAGACGCATGAACGTCCT
	2897	CGGCTGGTAGAACTGTGCATCGTA	TACGATGCACAGTTCTACCAGCCG
	2898	TTCGAAATGTACTTCCCACGCGGA	TCCGCGTGGGAAGTACATTTCGAA
	2899	GCAGGTTGGCTGTCTTGTGGAGTC	GACTCCACAAGACAGCCAACCTGC
	2900	CGTTTGGTTGCTTCAAGAACCGGT	ACCGGTTCTTGAAGCAACCAAACG
35	2901	CATACTTGGTTGTTGTGCCCACGC	GCGTGGGCACAACAACCAAGTATG
	2902	GGGGTCGGCTGAAGTGTTTTATCC	GGATAAAACACTTCAGCCGACCCC
	2903	GTGACGGTTGATTAACGACCGTGG	CCACGGTCGTTAATCAACCGTCAC
	2904	CTTATGGCAGCGCCAGGGGCACTC	GAGTGCCCCTGGCGCTGCCATAAG
	2905	GTTAGGGGACCCACCTCGTTTGAT	ATCAAACGAGGTGGGTCCCCTAAC
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	2907	TTCTTCATCAGCAGTCCCCGAGAA	TTCTCGGGGACTGCTGATGAAGAA

	2908	AGTTGCGTCCCTTGATGGCATTTT	AAAATGCCATCAAGGGACGCAACT
	2909	CCGACTTTCGTCCACGATTCCTCT	AGAGGAATCGTGGACGAAAGTCGG
	2910	ACTTGGCCGGACGACAGCAAAGAC	GTCTTTGCTGTCGTCCGGCCAAGT
:	2911	CACCGCGGTAGATGTATCCCTTCC	GGAAGGGATACATCTACCGCGGTG
5	2912	GTTAGCTTTAGCTCGGCACGCCTG	CAGGCGTGCCGAGCTAAAGCTAAC
	2913	GCGCATAAGAAGGTCCGCTAAAGC	GCTTTAGCGGACCTTCTTATGCGC
	2914	ACATCATCACGCCTGGCGTGACCA	TGGTCACGCCAGGCGTGATGATGT
	2915	CCGGCGAAGTTTGGTGTGATTAGA	TCTAATCACACCAAACTTCGCCGG
	2916	TGCACCGCCAGATTGTGCTGAGTC	GACTCAGCACAATCTGGCGGTGCA
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	2918	CCTCTGGAGGGGATTAGCCACGCT	AGCGTGGCTAATCCCCTCCAGAGG
	2919	CAATAGCCATGTCACTGGCAACGG	CCGTTGCCAGTGACATGGCTATTG
	2920	ACCCATGGTTCCAACGTTCTTTCG	CGAAAGAACGTTGGAACCATGGGT
	2921	AATCTGGTCTTGGCATCCTCCAAA	TTTGGAGGATGCCAAGACCAGATT
15	2922	GTATACCGGTGCATGCTGAAGCAA	TTGCTTCAGCATGCACCGGTATAC
	2923	AGTGTTCTGGTTCGAGTCGACCCG	CGGGTCGACTCGAACCAGAACACT
	2924	CGGGTATTCGACACACACGAGGAC	GTCCTCGTGTGTGTCGAATACCCG
	2925	AGTGCAACAGAGCGCTTGGTCACG	CGTGACCAAGCGCTCTGTTGCACT
	2926	TGCACCTATAGTTTGGTGCCGGTG	CACCGGCACCAAACTATAGGTGCA
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	2928	AGTCCACACCTCGAACGACAGGCG	CGCCTGTCGTTCGAGGTGTGGACT
	2929	CGCCGACCTGGTCAAAGAGCGCTA	TAGCGCTCTTTGACCAGGTCGGCG
	2930	GCCTAAGGGCCTGTCGTTTTCCGA	TCGGAAAACGACAGGCCCTTAGGC
_ [	2931	TGTGCGTGCTTATGTTCCGGTCTC	GAGACCGGAACATAAGCACGCACA
25	2932	CAACCGTTGGCCGTAACAAAAATC	GATTTTGTTACGGCCAACGGTTG
	2933	CGAGAATCAAGGCGTACCATCTCG	CGAGATGGTACGCCTTGATTCTCG
ļ	2934	GCGTAGGCAGCCTCCAGGGAATGG	CCATTCCCTGGAGGCTGCCTACGC
	2935	GATGGTGTTTTCGCCAAGACCAAT	ATTGGTCTTGGCGAAAACACCATC
	2936	CAAGCTAGGGACAGAATTGCCCAC	GTGGGCAATTCTGTCCCTAGCTTG
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	2938	TCAAGACCCGCAATGTGTTCATGT	ACATGAACACATTGCGGGTCTTGA
	2939	GCGGCTGGTAGACTCTTTGCACAA	TTGTGCAAAGAGTCTACCAGCCGC
	2940	CAGGCGTAAACCTGAACCAAACGG	CCGTTTGGTTCAGGTTTACGCCTG
	2941	GCCGATCTGTGCTGAGGTTCATCA	TGATGAACCTCAGCACAGATCGGC
35	2942	GATATCGCGTCGCAATATCACGCG	CGCGTGATATTGCGACGCGATATC
-	2943	CCCTGCACGATTAAGCCACCTGTA	TACAGGTGGCTTAATCGTGCAGGG
	2944	TGACATACAGATTTGTGTGGCCCC	GGGGCCACACAAATCTGTATGTCA
ļ	2945	GTTTGCGGCCGGTATTCACGATGT	ACATCGTGAATACCGGCCGCAAAC
ļ.,	2946	TTTTACCTGGCCATTGGTGAGCTC	GAGCTCACCAATGGCCAGGTAAAA
40	2947	CTCTACTCAATCAGGGTGGGAGCG	CGCTCCCACCCTGATTGAGTAGAG
Ĺ	2948	GGGTTGGAGGGAGTCTTGACCATT	AATGGTCAAGACTCCCTCCAACCC

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	2949	CGAGGTCGGTAAGGAAAAGCTTGC	GCAAGCTTTTCCTTACCGACCTCG
	2950	CTTTACGCAGGCACCTCCGAGCTG	CAGCTCGGAGGTGCCTGCGTAAAG
	2951	CATTGTATGGCCACGTGATTGACG	CGTCAATCACGTGGCCATACAATG
	2952	GTACGGTGCGAGAGCGCCTAAGCG	CGCTTAGGCGCTCTCGCACCGTAC
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	2954	TACGCCTTCCGCTATAGCTCGTGA	TCACGAGCTATAGCGGAAGGCGTA
	2955	CTGTACGCCACGCATGAAGGGTGA	TCACCCTTCATGCGTGGCGTACAG
	2956	CTTACGCGTCCAATGACTGCCACC	GGTGGCAGTCATTGGACGCGTAAG
	2957	CACATGGTAGAACTCGATCGGCAG	CTGCCGATCGAGTTCTACCATGTG
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	2959	ACTATGGCAACCGACACTTGGTCC	GGACCAAGTGTCGGTTGCCATAGT
	2960	CTAGTTTGCGCTACCCACCTGCAA	TTGCAGGTGGGTAGCGCAAACTAG
	2961	TAGTATCGCCCGACAATAGCCTGG	CCAGGCTATTGTCGGGCGATACTA
	2962	CCAATATTTACGGCCTGATCAGCG	CGCTGATCAGGCCGTAAATATTGG
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	2964	CAAAACTTGGCAGGCTTGGGACTT	AAGTCCCAAGCCTGCCAAGTTTTG
	2965	AATGACCGAGGCTGCAAGATTGAC	GTCAATCTTGCAGCCTCGGTCATT
	2966	ATCATCTTTCGCCACCAGACATGG	CCATGTCTGGTGGCGAAAGATGAT
	2967	CGTTATTACCGATGCACACGTTGC	GCAACGTGTGCATCGGTAATAACG
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	2969	AGGTTGGTAGGAAATCGGAGCGCT	AGCGCTCCGATTTCCTACCAACCT
	2970	GCTGAACCACTGTGGTCAAGATGC	GCATCTTGACCACAGTGGTTCAGC
	2971	CGTTGAGTACGACACGGTCGAGGT	ACCTCGACCGTGTCGTACTCAACG
	2972	TTTTTCCGCCGCAATGTGATCTAA	TTAGATCACATTGCGGCGGAAAAA
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	2974	AGTATCCCTGCTGGCATACACGGG	CCCGTGTATGCCAGCAGGGATACT
	2975	TCTTGGGCTCGGTAGTTCAGCACT	AGTGCTGAACTACCGAGCCCAAGA
	2976	CCCTATATCGAGCCCATAGGGCGA	TCGCCCTATGGGCTCGATATAGGG
	2977	CACGAGTGGCATCAACGGCCTACT	AGTAGGCCGTTGATGCCACTCGTG
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	2979	GCTTGACCGCTGCTAACCTCGTAC	GTACGAGGTTAGCAGCGGTCAAGC
	2980	TTTTGCATCTCTCCACCATCCAGA	TCTGGATGGTGGAGAGATGCAAAA
	2981	AGAATGTGCACCGGCTTCCATCTT	AAGATGGAAGCCGGTGCACATTCT
	2982	TGTTATGACCCGCTCTGTGGCGTG	CACGCCACAGAGCGGGTCATAACA
35	2983	GGAGCTCCTGTTTCATCGAGGCTA	TAGCCTCGATGAAACAGGAGCTCC
	2984	CATTTTGCTGTTTGGGGGTCCCAT	ATGGGACCCCAAACAGCAAAATG
	2985	CCCGCTCCTTCACGTGAGACGAGA	TCTCGTCTCACGTGAAGGAGCGGG
	2986	GCGCTCAAGTCGATTGCCACAACC	GGTTGTGGCAATCGACTTGAGCGC
	2987	CGGTTGACGGAGACCGCAGTACTT	AAGTACTGCGGTCTCCGTCAACCG
40	2988	ACTCAAGACCGGTGCACCTCCAGC	GCTGGAGGTGCACCGGTCTTGAGT
	2989	TTTCGTGTGCATGCAAGTAATGGC	GCCATTACTTGCATGCACACGAAA

	2990	GCGGCGTTAGCTCGAGCTAACAAA	TTTGTTAGCTCGAGCTAACGCCGC
	2991	GGGTATCCTGCCCGAGCAGTAATT	AATTACTGCTCGGGCAGGATACCC
	2992	GGCTCCGAATCTCTTGTCCGGTCT	AGACCGGACAAGAGATTCGGAGCC
	2993	AGGATGGCCACGCCGAATCAAAGT	ACTITGATTCGGCGTGGCCATCCT
5	2994	GTGCGGGACGTTTACATAACGAG	CTCGTTATGTAAACGTCCCCGCAC
	2995	ACTTTTGACCTGAGGCCGCTTGCA	TGCAAGCGGCCTCAGGTCAAAAGT
	2996	ACTCCGCTTCAATGGAGACCGTTG	CAACGGTCTCCATTGAAGCGGAGT
	2997	GATCGGAATTCGCCGCCATATTGA	TCAATATGGCGGCGAATTCCGATC
	2998	ATGCGTGCCCATGGAATGACTTTT	AAAAGTCATTCCATGGGCACGCAT
10	2999	CCGCATCGCACGAAGGCAGGTCAT	ATGACCTGCCTTCGTGCGATGCGG
	3000	CACCCTATGCGTCTCCAATTCCTG	CAGGAATTGGAGACGCATAGGGTG
	3001	TGATATGCATCGCTGAGCCTCTGT	ACAGAGGCTCAGCGATGCATATCA
	3002	AGCTTCACACGCTCACTGAACCTG	CAGGTTCAGTGAGCGTGTGAAGCT
	3003	AACCCGGAACCTCCTCTCACTCGG	CCGAGTGAGAGGAGGTTCCGGGTT
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	3005	GTAGCTGGCAACAGGCAATCAGGA	TCCTGATTGCCTGTTGCCAGCTAC
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	3007	CAGTATCTGAAACACGGGGTGCTG	CAGCACCCGTGTTTCAGATACTG
	3008	GGCTAAAATGGGCGCCCACGTGTA	TACACGTGGGCGCCCATTTTAGCC
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	3010	TATTGTTAGGCACCGCTTCGCGCT	AGCGCGAAGCGGTGCCTAACAATA
	3011	GGAACTAGATTGCCAGTGCTCGCC	GGCGAGCACTGGCAATCTAGTTCC
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	3013	GGTACTGTTAGCTCGACGATGGCC	GGCCATCGTCGAGCTAACAGTACC
25	3014	CCGCAATACTTGACGGTAACAGGG	CCCTGTTACCGTCAAGTATTGCGG
	3015	AATTCCGGGTTTGAACGGTTGGAA	TTCCAACCGTTCAAACCCGGAATT
	3016	GACACGCAATCGGGTCTATGCGAA	TTCGCATAGACCCGATTGCGTGTC
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	3018	TGCCATAGGGAGGAAACGCAATTA	TAATTGCGTTTCCTCCCTATGGCA
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	3020	GCTTTAGCGGTCATACGACCACCA	TGGTGGTCGTATGACCGCTAAAGC
	3021	CCGCTACCAACAATCCGATTAACG	CGTTAATCGGATTGTTGGTAGCGG
	3022	GAGGATCTGGCCACATCGAGAAAG	CTTTCTCGATGTGGCCAGATCCTC
	3023	CTCGTTTGGTACCACGTTTTGCCG	CGGCAAAACGTGGTACCAAACGAG
35	3024	AATACACGCGGCGTAAACAGACGA	TCGTCTGTTTACGCCGCGTGTATT
	3025	TGTCATGGGCCAAATGACAGTGGC	GCCACTGTCATTTGGCCCATGACA
	3026	ACAGCACTTCCGACCCGTGTACGA	TCGTACACGGGTCGGAAGTGCTGT
	3027	CTCCGTAAAGAGCACAGCTTTGCC	GGCAAAGCTGTGCTCTTTACGGAG
	3028	ACGAACAGGTAGGGATCGGTCCTC	GAGGACCGATCCCTACCTGTTCGT
40	3029	TGGATCCACCTTACCGCGCCATCG	CGATGGCGCGGTAAGGTGGATCCA
	3030	AGTATCAAATAGCGGCGCGGCAAG	CTTGCCGCGCCGCTATTTGATACT

3033 AGTGTCGAGCCAACTCCCACCAAT ATTGGTGGGAGTTGGCTCGACACT 3034 AAATGACATCCGTTTTGGCCACAGC GCTGTGGCCAAACGGATGTCATTT 3035 CGAATCATATCGCCACTCGAACTGG CCAGTTCGATGGCGATATGATTCG 3036 TATAATGCACTCGCTTGGTGCCAA 3037 TACACTGCCATTGGTGCCAA 3038 CACGCGGGAAGAGCACTTGGTCCCAA 3037 CCCAAGCAGATGGTAATTATGGCG 3038 CACGCGGGAAGAGCACGTAGAACT 3039 TACCCGAGAATTTGGAGAACAGC CCCCTATAATTACCATCTGCTTGGC 3039 TACCCGAGAATTTGGAGAACAGC CCCTGTTCCCCAATTCTCGGGTA 3040 TGACCGCCACACTGGACATC AGTTCAACGGGTTGGCACT 3041 CACAGTGTTCCAGCCCTTGACGAT ATCGTCAAGGGCTGGAACACTGTG 3042 TACCCGCCCACACATGAAAGTTGG CCAACTTTCATGTGGGGGGGTA 3043 TGGCATATTTAAGATTCGGCGACG CGCTGTTCACCACGTTTTCATGT 3044 ACTGAAAAAAAGAACGGGTAGCGGG CCCGCTACCCGTTTTTTTTCAGT 3045 TCTGACCCCCAATGAGAGTTG CAATGACCACCTTTTTTTTCAGT 3046 ACTTTTTGGCGGGACC CCCGCTACCCGTTCTTTTTTTCAGT 3047 CTGCCCCAATAGGTGGTCATTG CAATGACCACCTATTGCGGCACA 3048 CGGAGGTAATTGCGCGATCC CGGATCCCACTATTTAACTCCCG 3049 AGCGCTTCCAAACGTCTTCTT ACCAGCACATGAAACATTTAACCTCCG 3049 AGGCGTTCCCAAACGTCCTTCTT ACCAGAGAGAGGCCCGCCAAAAACT 3047 CTGCCCAAACATGCTCTTCTT ACCAGACAGAAGACGCCCCACAAAACT 3048 AGGCGTTCTCAAACGTCCTTCTT ACACAAGAACGACTTTGAACACCTT 3050 AGATGCTATCCTGAAGAGCACCGTGC CCACGGTCTCTTCACCCTGT 3051 ACAGGGTGAAGACCGTGGGATG 3052 GACTGTCTAACGGACCACCAGTT 3053 AGCTGTTAACGGACCACCAGCT 3053 AGCTGTTAACGGACCACCAGCGT CATCCACACGGTCTCTTCACCCTGT 3054 TGCGCTAACAGCACCACCAGCT 3055 ATGCGCGCTTCTTCTCTCTAACAGCAACCGCT 3056 TATCAGGACCCACCACCGGT CAACAGAAATGCACCACCACCAGCT 3056 TTAAGGGCCTCCTCTTTCTTCTTCAACAGCAACCACCACCACCACCACCACCAGCTTCTTTCACCCTGT 3056 TTAAGGGCCTCCCGCTCTTTTCACCCGGTCCTAACAACCT 3057 ACCTTTAACCTGAGGACCACACCAGT ACCAGCTTCTTCACCCCTGAACACCACCACCAGCACCACCAGCACCACCACCAGCACCAC				
3033 AGTGTCGAGCCAACTCCCACAAT ATTGGTGGAGTTGGCTCGACACT 3034 AAATGACATCCGTTTGGCCACAGC GCTGTGGCCAAACGGATGTCATTT 3035 CGAATCATATCGCCATCGAACTGG CCAGTTCGATGGCGATATATTA 3036 TATAATGCACTCGCTTGGTGCGCA TGCGCCACAACGGATGTCATTATA 3037 GCCAAGCAGATGGTAATTATGGCG 3038 CACGCGGGAAGAGCACTGGAACTG CCCCATAATTACCATCTGCTTGGC 3038 CACGCGGGAAGAGCACGTAGAACT AGTTCACGTGCTTTCCCGCGTG 3039 TACCCGAGAATTTGGAGAACAGC CGCTGTTCCCCAATTCTCGGGTA 3040 TGACGGCAAACTGGAACAGC CGCTGTTCCCCAATTCTCGGGTA 3041 CACAGTGTTCCAGCCCTTGACGAT ATCGTCAAGGGCTGGAACACTGTG 3042 TACCCGCCCACAACTGAAAGTTGG CCAACTTTCATGTGGGGGGGTA 3043 TGGCATATTTAAGATTCGGCGAC CGTCGCCGATCTTAATATGCCA 3044 ACTGAAAAAAAGACGGGTAGCGGG CCCGCTACCCGTTCTTTTTTCAGT 3045 TCTGACCCGCAATAGGTGGTCATTG CAATGACCACCTATTGCGGTAAGAAAAAAAAAA		3031	GAATTACATTGTGGATGGAGGCGG	CCGCCTCCATCCACAATGTAATTC
3034   AAATGACATCCGTTTGGCCACAGC   GCTGTGGCCAAACGGATGTCATTTC		3032	CTCCTCGGGGAGTCGAGGAGTACG	CGTACTCCTCGACTCCCCGAGGAG
5 3035 CGAATCATATCGCCATCGAACTGG CCAGTTCGATGGCGATATGATTCG 3038 TATAATGCACTGGTTGGTGCGCA TGCGCACCAAGCGAGTGCATTATA 3037 GCCAAGCAGATGGTAATTATGGCG CGCCATAATTACCATCTGCTTGGC 3038 CACGCGGGAAGAGCACGTGAGAACT AGTTCTACGTCCTTCCTGCGCG 3039 TACCCGAGAATTTGGAGGACACG CGCTGTTCTCCAACTTCTCGGGTA 3040 TGACGGCAAACTGTGGCATCATC GATAGATGCCACAGTTTGCCGCTCA 3041 CACAGTGTTCCAGCCTTGACGAT ATCGTCAAGGGCTGGAACACTGTG 3042 TACCCGCCCACACATGAAAGTTGG CCAACTTTCATGTGTGGCGGGCACACTGTG 3043 TGGCATATTTAAGATTCGGCGAC CGTCGCCGAATCATTAATATGCCA 3044 ACTGAAAAAAGAACGGGTAGCGGG CCCGCTTACCCGTTCTTTTTCAGT 3045 TCTGACCGCAATAGTTGGTGCACC 3046 ACTTTTTGGCGGACCCCTCTCTGT ACGAGAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTGCGCGATCC CGATCGCGAATCATCTGGGCACG 3048 CGGAGGTTAAATGCTTTAACCGGC CCGGTTAAGCATTTAACATCTGGCACG 3049 AGGCGTCTCCAAACGTCCTTCTGT ACGAGAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTTAACCGGC CCGGTTAAAGCATTTTAACCTGCACGAACGACGAACGACGAACGA		3033	AGTGTCGAGCCAACTCCCACCAAT	ATTGGTGGGAGTTGGCTCGACACT
3036 TATAATGCACTCGCTTGGTGCGCA 3037 GCCAAGCAGATGGTAATTATGGCG 3038 CACGCGGGAAGAACTGTAATTATGGCG 3038 CACGCGGGAAGACCACGTAGAACT 3039 TACCCGAGAATTTGGACAACC 3039 TACCCGAGAATTTGGAGAACCACGC 3039 TACCCGAGAATTTGGAGAACCACGC 3040 TGACGGCAAACTGTGGCATCTATC 3041 CACAGTGTTCCAGCCCTTGACGAT 3041 CACAGTGTTCCAGCCCTTGACGAT 3042 TACCCGCCACACATGAAAGTTGG 3043 TGGCATATTTAAGATTCGGCGAC 3044 ACTGAAAAAAAGAACGGGTAGCGGG CCCGCTACCCGTTCTTTTTTTCAGTCTGTTTTTTTTCAGT 3045 TCTGACCGCAATAGTGGCATCT 3046 ACTTTTTGGCGGACG CGTCGCCGAATCTTAAATATGCCA 3047 CTGCCCAATAGGTGGTCATTG 3048 ACTTTTTGGCGGGCCCTCTCTCGT ACGAGAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTGCGCGATCG CGGATCGCGTTAAACCTCCGG 3048 AGGGGTTAAATGCTTTAACCGGC GCCGGTTAAAGCATTTAACCTCCG 3049 AGGCGTTCCAAACGTCCTTCTGT ACGAAGAGAGGGCCCGCCAAAAAGT 3050 AGATGCTTCCAAACGTCCTTCTGT ACAGAAGAGAGGTCCGCCAAAACGT 3051 ACAGGGGAACACGCGG GCCGGTTAAAGCATTTAACCTCCG 3052 GACTGTCAAACGTCCTTCTGT ACAGAAGAGAGGTCCCGCCAAAAAGT ACAGGGGAACACGACGACGC GCCGGTTAAAGCATTTAACCTCCG 3053 AGATGCTTCCAAACGTCCTTCTGT ACAGAAGGACGTTTGGAGAACGCCTCT 3051 ACAGGGGAAACGAACGACGC GCAGGCCCACTCAGGAATAGCATCT 3052 GACTGTTAAGGGACACGACCG GCAGGCCCACTCAGGAATAGCACTCT 3053 AGCTGTTAAGGAACACGACGACG CATCCAGGTCTCTTCACCCTGT 3054 TTGCGTAGTGGGCATTCCTCT ACAGGAAATGCCCAACACGCT 3055 ATGCGCGCTTCTTTCTTTTCTTTAATTTATATTATACCGCAA 3056 TTAAGGGCGGCCGCTCTATTCAC CTGTTAACACACCCGAAACGCGCATTAACGCCGAACCGCAT 3056 TTAAGGGCGTCCGCGCCCTCTATTCACCCTGT 3057 ACCTTTAAACTTGACCGCGGCCC GGGCCGGGTACAAAGTTTAAACTTGACCCCCGACACCACACCGCAATGACAAAATT AACATGTGGCTCCTCTCGAACCG 3060 CAGGGCGATAGTCACATGAGAATAAACACGGGGACCCCCTTCGCAACCCG 3060 CAGGGCGATAGTCACATGAGAAATT AACATTGACACACCCCTTCGAACCG 3061 GCTTGACTGCCCCCTTTTCATATGT ACCTCACGGTACAACCCCTTCGCAACACCCCTTCGCAACACCCCCCCACTTCGCAACCCGCAATGACAAAATT AACATTGACGCCGGACCCCCTTTCAACGCGGGCCGGTTAACGCCCTTCGCAACCGCAACACGGGACCCCCAATGACAAAATT AACATTGACCCCCTTCGCAACCGCAATGACAAAATT AACATTGACGCGGGACCCCCTTTCGAACCGCGAACAACGCGCAATGACAAAACAGGGCCCCCCAATTGACAACCCCTTCGCAACCGCAATGACAAACAGGCCCCCAATTGACAACCCCTTCACCG 3063 GCACCCCAATGACAAAGAAATT AACTTTGCCCCCGTTTTTCATTACGACC 3066 GCTCCTAACAGGGAGAAGAAATTCACCGAACCCCCAA		3034	AAATGACATCCGTTTGGCCACAGC	GCTGTGGCCAAACGGATGTCATTT
3037 GCCAAGCAGATGGTAATTATGGCG CGCCATAATTACCATCTGGCTGGC 3038 CACGCGGGAAGAGCACGTAGAACT AGTTCTACGTGCTCTTCCCGCGTG 3039 TACCCGAGAATTTGGAGAACAGCG CGCTGTTCTCCCAATTCTCCGGGTA 3040 TGACGGCAAACTGTGGCATCTATC GATAGATGCCACAGTTTGCCGGTA 3041 CACAGTGTTCCAGCCCTTGACGAT ATCGTCAAGGGCTGGAACACTGTG 3042 TACCCGCCCACACATGAAAGTTGG 3043 TGGCATATTTAAGATTCGCGGAC CGTCGCCGAACACTGTAGCCACGTTTAATTATGCCA 3044 ACTGAAAAAGAAGCGGGTAGCGGG CCCGCTACCCGTTCTTTTTTCAGT 3045 TCTGACCGCCAATAGAGTTGGC CAATGACACCTGTTG 3046 ACTTTTTGGCGGGCCCTCTCTGT ACGAGAGAGGCCCGCCAAAAAGT 3047 CTGCCCAGAATCATTGCGCGATC CGATCACCACTATTGCGGTCAGA 3048 CGGAGGTTAAATGCTTTAACCGGC GCCGGTAACACTTTGAGCACC 3049 AGGCGTCTCCAAACGTCCTTCTGT ACGAGAGAGGGCCCGCCAAAAAGT 3050 AGATGCTACCACGTCCTTCTGT ACAGAAGGACGCCTTGAGCACCCACTATGACGCCCACAACGTCATTGAGCACCCTTCTGT ACAGAAGGACGCCTTGAGCACCCCTTCAGCAACGTCCTTCTGT ACAGAAGGACGCTTCACCCCTGTTGAGCACACCGC GCGGTTAAAGCATTTAACCTCCC 3050 AGATGCTACCTCAAACGTCCTTCTGT ACAGAAGGACGCTTTGAGCACACCCCCACACCGGTCTCTTCACCCCTGTTAGACAGCCCCACACCACGCCCACCCA	5	3035	CGAATCATATCGCCATCGAACTGG	CCAGTTCGATGGCGATATGATTCG
3038 CACGCGGGAAGAGCACGTAGAACT 3039 TACCCGAGAATTTGGAGAACAGCG 3039 TACCCGAGAATTTGGAGAACAGCG 3040 TGACGGCAAACTGTGGCATCTATC 3041 CACAGTGTTCCAGCCCTTGACGAT 3041 CACAGTGTTCCAGCCCTTGACGAT 3042 TACCCGCCCACACATGAAGTTGG 3042 TACCCGCCCACACATGAAAGTTGG CCAACTTTCATGTGTGGCGGTA 3043 TGGCATATTTAAGATTCGGCGACG 3044 ACTGAAAAAGAACGGGTAGCGGG 3045 TCTGACCGCAATAGGTGGCCCCCCCTTCTTTTTTCAGT 3046 ACTTTTTGGCGGGCCCCCCCCCTTCTCGT 3046 ACTTTTTGGCGGGCCCCCCCCCTTCTCGT 3047 CTGCCCAGATCATTGCCCGATCCCCTTCTTTTTTCAGT 3048 CGGAGGTAAATGCTTTAACCGCC 3049 AGGCGTCTCCAAACGTCCCTTCTGT 3049 AGGCGTCTCCAAACGTCCTTCTGT 3050 AGATGCTATCCTGAAGTGGGCCTGC 3050 AGATGCTACCCTTCTGT 3051 ACAGGGGTAACGGCTGC 3052 GACTGTCTAACGGAGAACACGGT 3053 AGCTGTTAAGGAGACCCTGC 3054 AGTGCTACCGGAACACGGC 3055 AGCTGTTAACGGACACACGACG 3054 TTGCGTAAGGTTGGCCAAAACGGCCCACTCAGGATAGCATCT 3055 ATGCGCGCTTCTTCCTTAGTTGACGAAATGCCCCACACACA		3036	TATAATGCACTCGCTTGGTGCGCA	TGCGCACCAAGCGAGTGCATTATA
10 3039 TACCCGAGAATITIGAGAACAGCG CGCTGTTCTCCAAATITCTCGGGTA 3040 TGACGGCAAACTGTGGCATCTATC GATAGATGCCACAGTTTGCCGTCA 3041 CACAGTGTTCCAGCCCTTGACGAT ATCGTCAAGGGCTGAACACTGTG 3042 TACCCGCCCACACATGAAAGTTGG CCAACTTTCATGTGTGGCGGGTA 3043 TGGCATATTTAAGATTCGGCGACG GCCCCGAACTCTTAAATATGCCA 3044 ACTGAAAAAAGAACGGGTAGCGGG CCCGCTACCCGTTCTTTTTTCAGT 3045 TCTGACCGCAATAGGTGGTCATTG CAATGACCACCTATTGCGGTCAGA 3046 ACTTTTTGGCGGGCCCTCTCTCGT ACGAGAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTGACCGGC CGCGGTACCGGTCTTTTTTTCAGT 3048 CGGAGGTTAAATGCTTTAACCGGC CGCGGTTAAGCATTTGAGCCAC 3049 AGGCGTCTCAAACGTCCTTCTGT ACGAGAGAGGGCCCGCCAAAAAGT 3049 AGGCGTCTCAAACGTCCTTCTGT ACAGAAGGACGTTTTGAGCACCCG 3050 AGATGCTAACGTCCTTCTGT ACAGAAGGACGTTTGAGACACCCCTG 3051 ACAGGGTGAAACGTCCTTCTGT ACAGAAGGACGTTTGAGACACCCCG 3052 GACTGTCTAACGGACGACCGC CGCGGTTAAACCATTCTACCCCTGT 3053 AGCTGTTAGCGGACACACGCC CGCGCTAAAACGTCTTCACCCTGT 3054 TTGCGTAAGGACCCGACAACCGCC ACCCCACCCACCACCACCCCACCCA		3037	GCCAAGCAGATGGTAATTATGGCG	CGCCATAATTACCATCTGCTTGGC
10 3040 TGACGGCAAACTGTGGCATCTATC GATAGATGCCACAGTTTGCCGTCA 3041 CACAGTGTTCCAGCCCTTGACGAT ATCGTCAAGGGCTGGAACACTGTG 3042 TACCCGCCCACACTGAAAGTTGG CCAACTTTCATGTGTGGGCGGGTA 3043 TGGCATATTTAGATTCGGCGACG CGTCGCCGAATCTTAATATGCCA 3044 ACTGAAAAAAGAACGGGTAGCGGG CCCGCTACCCGTTCTTTTTCAGT 15 3045 TCTGACCGCAATAGGTGTCATTG CAATGACCACCTATTGCGGTCAGA 3046 ACTTTTTGGCGGGCCCTCTCTCGT ACGAGAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTGCGCGATCCG CGGATCGCGCAATGATCTGGGCAG 3048 CGGAGGTTAAATGCTTTAACCGGC GCGGTTCAAGCATTTAACCTCCG 3049 AGGCGTCTCCAAACGTCCTTCTGT ACAGAAGAGACGTTTGAGACACCCT 3050 AGATGCTATCCTGAGTGGGCCTGC GCAGGCCCACTCAGGATAGACTCT 3051 ACAGGGTGAAGAGACCGTGGGATG CATCCACGGTCTCTCACCCTGT 3052 GACTGTCTAACGGACCGACACCACG 3053 AGCTGTTAAGCACCGACACCACG 3054 TTGCGTAGTGGGCCTTCCTTCTT ACAGAAAGAACACACTC 3055 AGCTGTTAGGACCCGACAACCACG 3056 TTAAGGGCGTCCGCGCTCTCTCTT AGAGCAAAAGTTCCCACACACACACACACACACACACACA		3038	CACGCGGGAAGAGCACGTAGAACT	AGTTCTACGTGCTCTTCCCGCGTG
3041 CACAGTGTTCCAGCCCTTGACGAT ATCGTCAAGGGCTGGAACACTGTG 3042 TACCCGCCCACACATGAAAGTTGG CCAACTTTCATGTGTGGGCGGGTA 3043 TGGCATATTTAAGATTCGCGACG CGTCGCCGAATCTTAAATATGCCA 3044 ACTGAAAAAAGAACGGGTAGCGGG CCCGCTACCCGTTCTTTTTTCAGT 3045 TCTGACCGCAATAGGTGGTCATTG CAATGACCACCTATTGCGGTCAGA 3046 ACTTTTTGGCGGGCCCTCTCTCGT ACGAGAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTGCGCGATCCG CGGATCGCGCAAAAGAT 3048 ACTTTTTGGCGGGCCCTCTCTCGT ACGAGAGAGAGGCCCCCCAAAAAGT 3049 AGGCGTCTCCAAACGTCTTCTGT ACGAGAGAGAGGCCCCCCAAAAAGT 3049 AGGCGTCTCCAAACGTCCTTCTGT ACAGAAAGAACGTTTTGACCTCG 3049 AGGCGTCTCCAAACGTCTCTTGT ACAGAAAGACGTTTTGAGACCCCT 3050 AGATGCTATCCTGAGTGGGCCTGC GCAGGCCCACTCAGGATAGCATCT 3051 ACAGGGGAAAACGACCGC CGCGGTTAAAGCATTTTAACCTCCG 3052 GACTGTCTAACGGACGACACGACG CGTCGTGTCGTCCGTTAGACAGCT 3053 AGCTGTTAAGGACCCGACAACCGGT ACCGGTTGTCGGTCGTTAGACAGCT 3054 TTGCGTAGTGTGGGCATTTCCTT ACAGGAAATGCCCACACTACGCAA 3055 ATGCGCGTTCTTTCCTTGATGTA TACATCAAGGAAAGAAGCGCGCAT 3056 TTAAGGGCGTCCGGTCTATTCAG CTGAATAGACGCGGACACCCACTAAGGAAAAAAAAACGCCCTTAAACAGTT AACATCAAGGAAAAGAAACGCGCCTTAA 3057 ACCTTTAAACTTGTACCCCGGGCCC GGGCCGCGGTACAAGTTTAAAGGT 3058 AGGGATGCAAGAGGACCACACTGTT AACATCAAGGAAAAGAAACGCCCCTTAA 3059 CGGTTCGACGTATTCAGC TGCAATAGAACGCGGACCCCCTTAA 3059 CGGTTCGACGTATCAGACTCCCAA TGCCCAACGTTCACCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATTGAAACGGGGCAGTCCACC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTACAAGTTTAACGCCAACCCCTTGAATCACGCAACACCCCTTCGAACCCG 3063 AAAACGCACCACAGTTCAACTGT ACCTTCATTCCCTTGCATCCCT 3063 AAAACGCACCACAAGAACAAAATT AACTTCATTCCCCCAGAATACCACAGACAAAACAAA		3039	TACCCGAGAATTTGGAGAACAGCG	CGCTGTTCTCCAAATTCTCGGGTA
3042 TACCCGCCACACATGAAAGTTGG CCAACTTTCATGTGTGGGCGGGTA 3043 TGGCATATTTAAGATTCGGCGACG CGTCGCCGAATCTTAAATATGCCA 3044 ACTGAAAAAGAACGGGTAGCGG CCCGCTACCCGTTCTTTTTTCAGT 3045 TCTGACCGCAATAGGTGGTCATTG CAATGACCACCTATTGCGGTCAGA 3046 ACTTTTTGGCGGGCCCTCTCTCGT ACGAGAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTGCGCGATCCG CGGATCGCGCAATAGATCTGGGGCAG 3048 CGGAGGTTAAATGCTTTAACCGGC GCCGGTTAAAGCATTTAACCTCCG 3049 AGGCGTCCCAAACGTCCTTCTT ACAGAAGGACGTTTGGAGACGCCT 3050 AGATGCTATCCTGAGTGGGCCTGC GCAGGCCCACTCAGGATAGCATCT 3051 ACAGGGTGAAGAGACCGTGGGATG CATCCCACGGTCTTTCACCCTGT 3052 GACTGTCTAACGGACGACACCGGT CATCCCACGGTCCTTCACCCTGT 3053 AGCTGTTAGGACCCGACAACCGGT ACCGGTTGTGCGCACATACAGGT 3054 TTGCGTAGTGGGCCATTCCTCT AGAGAAAGAACGCCCACACTACGCAA 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAACGCCGCAA 3056 TTAAGGGCGTCCGCGTCTATTCAG CTGAATAGACCCGGACCCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCCC GGCCGCGGGACAACGACCACACAGGT 3058 AGGGATGCAGAGGACACACATGTT AACATCAAGGAAAAGAACGCCCGTA 3059 CGGTTCGACGTATGAGCACCCCACACTACCGCA 3060 CAGGGCGATAGTCACATGTT AACATCGTGGTCCCTTCCCT	10	3040	TGACGGCAAACTGTGGCATCTATC	GATAGATGCCACAGTTTGCCGTCA
3043 TGGCATATTTAAGATTCGGCGACG CGTCGCCGAATCTTAAATATGCCA 3044 ACTGAAAAAGAACGGGTAGCGGG CCCGCTACCCGTTCTTTTTTCAGT 3045 TCTGACCGCAATAGGTGGTCATTG CAATGACCACCTATTGCGGTCAGA 3046 ACTTTTTGGCGGGCCCTCTCTCGT ACGAGAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTGCGCGATCCG CGGATCGCGCAATGATCTGGGCAG 3048 CGGAGGTTAAATGCTTTAACCGGC GCCGGTTAAAGCATTTAACCTCCG 3049 AGGCGTCTCCAAACGTCCTTCTGT ACAGAAGGACGTTTGGAGACGCCT 3050 AGATGCTATCCTGAGTGGGCCTGC GCAGGCCCACTCAGGATAGCATCT 3051 ACAGGGTGAAGAGCCGTGGGCCTG GCAGGCCCACTCAGGATAGCATCT 3051 ACAGGGTGAACGACCGC GCAGGCCCACTCAGGATAGCATCT 3052 GACTGTCTAACGGACGACACGAC CGTCGTTCGTCCGTTAGACAGTC 3053 AGCTGTTAAGGACCCGACAACCGGT ACCGGTTCTTCACCCTGT 3054 TTGCGTAGTGGGCCATTTCCTCT ACAGGAAATGCCCAACACACGCA 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAAGCGCCCAT 3056 TTAAGGGCGCTCGCGTCTATCAG CTGAATAGACGCGGACGCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTAAAGGT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCCTTGCATCCCT 3059 CGGTTCGACGAACACGGT ACACTGTAACAGGT 3059 CGGTTCGACGAACACGGA TGCGGATGCCCTTACACGCAACCGG 3060 CAGGGCGATAGTCACATGGAGGTT AACATCTGACCACCTTCCCT 3059 CGGTTCGACCGATAGCACACACCGC TGCGGATGCCCCTTGCATCCCT 3059 CGGTTCGACCGCACACTAGGAGGTT AACATCTGACCACCCCTCC 3060 CAGGGCGATAGTCACATGGAGGTT AACATCTGACCACCCCTCC 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGGCAGTCAAGC 3062 CGAAGGGGTTTGCAATTACCCGA TCCGGATAATTGACACCCCTTCC 3063 AAAACGCACCGCAATGACAAAATT AATTTTGCATTGCCCCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGCTTTTTTCAGGACAACCCCTTCC 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCCCCATTTTTCAGGC 3067 ACATGAAAACAGGCCTCAACCG CGGTTGAGGCCTTTTTCAGGC 3068 GTCCGTAAATGGGGAGAATTGGA TCCAATTCCTCCCCATTTTCAGCC 3068 GTCCGCACATGCCAAGAAAATT AATTTTTCCTCCCCATTTTCAGGC 3068 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTTCATGCT 3068 GTCCGCACATGCACAGACAAAATT AATTTTCCTCCCCATTTTCAGGC 3069 GCCCCAATTGCACAGAAAATT AATTTTCCTCCCCATTTTCAGGC 3069 GCCCCAATTGCACAGAAAATT AATTTTCCTCCCCATTTTCAGGC 3069 GCCCCCAATGACAAAAATT AATTTTCCTCCCCATTTTCAGCCCTTTTTCAATGCACACCCTTCCCACCTTTTCCAACCC TCCCCCCCCCC		3041	CACAGTGTTCCAGCCCTTGACGAT	ATCGTCAAGGGCTGGAACACTGTG
3044 ACTGAAAAAGAACGGGTAGCGGG CCCGCTACCCGTTCTTTTTTCAGT 3045 TCTGACCGCAATAGGTGGTCATTG CAATGACCACCTATTGCGGTCAGA 3046 ACTTTTTGGCGGGCCCTCTCTCGT ACGAGAAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTGCGCGATCCG CGGATCGCGCAATGATCTGGGCAG 3048 CGGAGGTTAAATGCTTTAACCGGC GCCGGTTAAAGCATTTAACCTCCG 3049 AGGCGTCTCCAAACGTCCTTCTGT ACAGAAGGACGTTTGGAGACGCCT 3050 AGATGCTATCCTGAGTGGGCCTGC GCAGGCCCACTCAGGATAGCACTCT 3051 ACAGGGTGAAGAGACCGTGGGATG CATCCCACGGTCTCTTCACCCTGT 3052 GACTGTCAACGGACGACACGACG CGTCGTGTCGTCCGTTAGACAGTC 3053 AGCTGTTAGGGACCGACACCAGCG CGTCGTGTCGTCCGTTAGACAGCT 3054 TTGCGTAGTGTGGGCCTTTCTCT ACAGGAAAGAACGCCCACACCACA		3042	TACCCGCCCACACATGAAAGTTGG	CCAACTTTCATGTGTGGGCGGGTA
15 3045 TCTGACCGCAATAGGTGGTCATTG CAATGACCACCTATTGCGGTCAGA 3048 ACTTTTTGGCGGGCCCTCTCTCT ACGAGAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTGCGCGATCCG CGGATCGCGCAATGATCTGGGCAG 3048 CGGAGGTTAAATGCTTTAACCGGC GCCGGTTAAAGCATTTAACCTCCG 3049 AGGCGTCTCCAAACGTCCTTCTGT ACAGAAGGACGTTTGGAGACGCCT 3050 AGATGCTATCCTGAGTGGGCCTGC GCAGGCCCACTCAGGATAGCATCT 3051 ACAGGGTGAAGAGACCGTGGGATG CATCCCACGGTCTCTTCACCCTGT 3052 GACTGTCTAACGGACGACACGACG CGTCGTGTCGTCCGTTAGACAGTC 3053 AGCTGTTAGGACCCGACAACCGGT ACCGGTTGTCGGGTCCTAACAGGT 3054 TTGCGTAGTGGGCATTTCCTCT AGAGGAAATGCCCACACTACGCAA 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAAGAAAAGA		3043	TGGCATATTTAAGATTCGGCGACG	CGTCGCCGAATCTTAAATATGCCA
3046 ACTITITIGGCGGGCCCTCTCTCGT ACGAGAGAGGGCCCGCCAAAAAGT 3047 CTGCCCAGATCATTGCGCGATCCG CGGATCGCGCAATGATCTGGGCAG 3048 CGGAGGTTAAATGCTTTAACCGGC GCCGGTTAAAGCATTTAACCTCCG 3049 AGGCGTCTCCAAACGTCCTTCTGT ACAGAAGGACGTTTGGAGACGCCT 3050 AGATGCTATCCTGAGTGGGCCTGC GCAGGCCCACTCAGGATAGCATCT 3051 ACAGGGTGAAGAGACCGTGGGATG CATCCCACGGTCTTTCACCCTGT 3052 GACTGTCTAACGGACGACACGACG CGTCGTGTCGTCCGTTAGACAGTC 3053 AGCTGTTAGGACCCGACAACCGGT ACCGGTTGTCGGGTCCTAACAGCT 3054 TTGCGTAGTGGGCATTTCCTCT AGAGGAAATGCCCCACACTACGCAA 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAACGCCGCAT 3056 TTAAGGGCGCGCCCCTTAATCAG CTGAATAGACGCGGACGCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCC GGGCCCCGGTACAACGTT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGATGACACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGATGACACACAGGTT AACATTGAAACGGGGCAGTCAAGC 3060 CAGGGCGATAGTCACATGGAGGTT AACATTGAAACGGGGCAGTCAAGC 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACCACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGCACAAACCCCTTCG 3064 ATTCCTGGACAAGACCCCTCAACCG CGGTTGAGGGTCTTGCACCTTTG 3066 GCTCGTAAATGGGGAGAAATT AATTTTGCACAAACCCCTTCG 3067 ACATGAAAACAGGCTCAATTGGA CCCCAATTGAGCCTTTTCAATGT ACATATGAAACGGGGCAGTCAAGC CCTACCTGCCTGCTAGCGGTGAGG CCCCAATTGAGGCTCTTTTCCACGGCGAACCCCCTTGCAACCG CGGTTGAGGGTCTTTTCCACGGCGAACCCCCTTGCAACCG CGGTTGAGGGCAGTCAAGC 3066 GCTCGTAAATGGGGAGAAATT AATTTTGCACAAACCCCTTTCG 3067 ACATGAAAACAGGCTCAATTGGG CCCCCAATTGAGCCTGTTTTCATGTG 3068 GTTCCGCACATGAGAAAAATT AATTTTCCTCCCCATTTTACGAGC 3069 GCTCCGAAATGGAGAAAAATT AATTTTCCTCCCCATTTTCATGGGCGAACCCCTTGCTGCAACCGCAAGCAA		3044	ACTGAAAAAGAACGGGTAGCGGG	CCCGCTACCCGTTCTTTTTCAGT
3047 CTGCCCAGATCATTGCGCGATCCG CGGATCGCGCAATGATCTGGGCAG 3048 CGGAGGTTAAATGCTTTAACCGGC GCCGGTTAAAGCATTTAACCTCCG 3049 AGGCGTCTCCAAACGTCCTTCTGT ACAGAAGGACGTTTGGAGACGCCT 3050 AGATGCTATCCTGAGTGGGCCTGC GCAGGCCCACTCAGGATAGCATCT 3051 ACAGGGTGAAGAGACCGTGGGATG CATCCCACGGTCTCTTCACCCTGT 3052 GACTGTCTAACGGACGACACGACG CGTCGTGTCGTCCGTTAGACAGTC 3053 AGCTGTTAGCGACCACACCGGT ACCGGTTGTCGGCCTAACAGGCT 3054 TTGCGTAGTGTGGGCCATTTCCTCT AGAGGAAATGCCCCACACTACGCAA 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAACGCGCGCAT 3056 TTAAGGGCGTCCGCGTCTATTCAG CTGAATAGACGCGCGCAT 3057 ACCTTTAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTTAAAGGT 3058 AGGGATGCAGAGGCACCCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGTATGAGCATCCGCA TGCGGATGCTCATACGCCACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTACGCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT ACATTGACACACCCCTTCG 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTTTCCAGGAAT 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCCAATTGGG CCCCCAATTGAGCCTGTTTTCATGT 3068 GTCCGCACATGACTAATTGGG CCCCCAATTGAGCCTGTTTTCATGT 3068 GTCCGCACATGACTAATTGGG CCCCCAATTGAGCCTGTTTTCATGT 3069 GCACCCAATACCACGAAGAAAATT AATTTTGTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCCAATTGGG CCCCCAATTGAGCCTGTTTTCATGT 3068 GTCCGCACATGACAATTGGG CCCCCAATTGAGCCTGTTTTCATGT 3068 GTCCGCACATGACTCAATTGGG CCCCCAATTGAGCCTGTTTTCATGT 3069 GCACCCAATACCACGAAGAAAAATT AATTTTGTCATTGCGGTGCGAAC 3069 GCACCCAATACCACGAAGAAAAATT AATTTTGTCATTGCGGTGCGTTTTTCATGT 3068 GTCCGCACATGACAAAATT AATTTTGTCATTGCGGTGCGTTTTTCATGT 3068 GTCCGCACATGACAAAATT AATTTTGTCATTGCGCTTGTCCAGGAAT 3069 GCACCCAATACCACGAAGAAAAAATT AATTTTGTCATTGCGGTGCGAAC 3069 GCACCCAATACCACGAAGAAAAAATT AATTTTTCTTCTTCGTGGTATTGGGGGAAC 3069 GCACCCAATACCACGAAGAAAAAATT AAAGATGGAGTTCGAAATGCCCCT	15	3045	TCTGACCGCAATAGGTGGTCATTG	CAATGACCACCTATTGCGGTCAGA
3048 CGGAGGTTAAATGCTTTAACCGGC GCCGGTTAAAGCATTTAACCTCCG 3049 AGGCGTCTCCAAACGTCCTTCTGT ACAGAAAGACGTTTTGGAGACGCCT 3050 AGATGCTATCCTGAGTGGGCCTGC GCAGGCCCACTCAGGATAGCATCT 3051 ACAGGGTGAAGAGACCGTGGGATG CATCCCACGGTCTCTTCACCCTGT 3052 GACTGTCTAACGGACGACACGACG CGTCGTGTCGTCCGTTAGACAGTC 3053 AGCTGTTAGGACCCGACAACCGGT ACCGGTTGTCGGGTCCTAACAGGCT 3054 TTGCGTAGTGTGGGCATTTCCTCT AGAGGAAATGCCCCACACTACGCAA 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAAGCGCGCAT 3056 TTAAGGGCGTCCGCGTCTATTCAG CTGAATAGACGCGGACGCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTTAAAGGT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGATAGACACCGCA TGCGGATGCTCATACGCCACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACCATATGAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACCACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCAGTCAGGAAT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTTTCCAGGAAT 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGA TCCACTTCCCCATTTACGAGC 3068 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3068 GTTCCGCACATGGATGAGAAAAAT TCCCAATTCCTCCCCATTTACGAGC 3069 GGCACCCAATGACAAAGAA TTCTTCTCTCCCCATTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATGACAAGAAAATT AATTTCTCTCCCCATTTTACGAGC 3069 GGCACCCAATGACAAAAAAATT AAAAAAAAAAAAAAAA		.3046	ACTITITGGCGGGCCCTCTCTCGT	ACGAGAGAGGGCCCGCCAAAAAGT
20 3050 AGATGCTCCAAACGTCCTTCTGT ACAGAAGGACGTTTGGAGACGCCT 3051 ACAGGGTGAAGAGACCGTGGGATG CATCCCACGGTCTCTTCACCCTGT 3052 GACTGTCTAACGGACGACGACG CGTCGTGTCGTTCACCCTGT 3053 AGCTGTTAGGACCCGACAACCGGT ACCGGTTGTCGGTCCGTTAGACAGTC 3054 TTGCGTAGTGTGGGCATTTCCTCT AGAGGAAATGCCCACACTACGCAA 3055 ATGCCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAAGACGCGCAT 3056 TTAAGGGCGTCCGCTATTCAG CTGAATAGACGCGGACGCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCC GGGCCGCGTACAAGTTTAAAGGT 3058 AGGGATGCAGAGACCCGA TGCGGATGCCTCTGCATCCCT 3059 CGGTTCGACGATCCGCAA 3060 CAGGGCGATAGTCACATGTT AACATGTGGTGCCTCTGAACCCG 3061 GCTTGACTGCCCCGTTTCATATGT ACCTTCAAACGGGGACGCCTTGA 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAAACTTGCCCTTG 3063 AAAACGCACCGCAATTACCCGA TCGGGTAATTGCACCCTTCG 3064 ATTCCTGGACAAAAATT AATTTTGTCATTGCAGCCCTTCG 3065 CCTACCTGCCTGCTAACCGC CGGTTGAGGGTCTTTCCAGGAAT 3066 GCTCGCAAAGACCCTCAACCG CGGTTGAGGGTCTTTCCAGGAAT 3067 ACATGAAAACAGGCTCAATTGGA TCCAATTCCCCCATTTACGAGC 3068 GCTCGTAAATGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3069 GCACCCAATGACAAAAATT AATTTTGTCATTCCCCCATTTACGAGC 3069 GCACCCAATGACAAAAATT AATTTCTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGA TCCAATTCCTCCCCATTTACGAGC 3068 GCTCGTAAATGGGAGAGAAAATTGAACAGCCTGATTTCATGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGAGAGAAAAATTGAGACCCTCAATCCATGTGCGGAAC 3069 GCACCCAATACCACGAAGAAAAATTAAAAGAGGCCTGAATCCATCC		3047	CTGCCCAGATCATTGCGCGATCCG	CGGATCGCGCAATGATCTGGGCAG
20 3050 AGATGCTATCCTGAGTGGGCCTGC GCAGGCCCACTCAGGATAGCATCT 3051 ACAGGGTGAAGAGACCGTGGGATG CATCCCACGGTCTCTTCACCCTGT 3052 GACTGTCTAACGGACGACACGACG CGTCGTGTCGTCCGTTAGACAGTC 3053 AGCTGTTAGGACCCGACAACCGGT ACCGGTTGTCGGGTCCTAACAGGCT 3054 TTGCGTAGTGTGGGCATTTCCTCT AGAGGAAATGCCCACACTACGCAA 25 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAAGCGCGCAT 3056 TTAAGGGCGTCCGCGTCTATTCAG CTGAATAGACGCGGAACGCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTTAAAGGT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGTATGAGCATCCGCA TGCGGATGCTCATACGTCGAACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTACGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAACCGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACCGCCCGCAATGACAAAATT ACTTTGTCATGAGCACCCTTCG 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTTTCCAGGAAT 35 3065 CCTACCTGCTGCTGACGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGAATTGGA TCCAATTCCTCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGACTAATTGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGACTAATTGGAG TCCCAATTCCTCCCATTTACGAGC 3069 GCACCCAATACCACGAAGAAAATT AATTTTCTCTCCCCATTTACGAGC 3069 GCACCCAATAGAGAAAATTGGAGTCTCCAATTCCTCCCCATTTTCATGT 3068 GTTCCGCACATGAGAAAAAATT AATTTTCTCTCCCCATTTTCATGT 3068 GTTCCGCACATGAGAAAAATT AATTTTCTCTCCCCATTTTCATGT 3068 GTTCCGCACATGAGAAAAATTGGAGCCTGAATTCCTCCCCATTTTCATGT 3068 GTTCCGCACATGAGAAAAATT AATTTTCTCTTCCCCATTTTCATGT 3068 GTTCCGCACATGAGAAAAAATT AATTTTCTCTCCCCATTTTCATGT 3068 GTTCCGCACATGAGAAAAAATT AATTTTCTCTCCCCATTTTCATGT 3068 GTTCCGCACATGAGAAAAAATT AATTTTCTCTCCCCATTTTCATGT 3068 GTTCCGCACATGAGAAAAAATT AAAAAAAAAAAAAAAA		3048	CGGAGGTTAAATGCTTTAACCGGC	GCCGGTTAAAGCATTTAACCTCCG
3051 ACAGGGTGAAGAGACCGTGGGATG CATCCCACGGTCTCTTCACCCTGT 3052 GACTGTCTAACGGACGACACGACG CGTCGTGTCGTCACCAGTC 3053 AGCTGTTAGGACCCGACAACCGGT ACCGGTTGTCGGGTCCTAACAGCT 3054 TTGCGTAGTGGGCATTTCCTCT AGAGGAAATGCCCACACTACGCAA 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAAGCGCGCAT 3056 TTAAGGGCGTCCGCGTCTATTCAG CTGAATAGACCGCGACCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTTAAAGGT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGTATGAGCATCCGCA TGCGGATGCCTATACGTCGAACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACCACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCACCACCCCTTCG 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTTCCAGGAAT 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGACC 3067 ACATGAAAACAGGCTCAATTGGA TCCAATTCCTCCCCATTTACGACC 3068 GCTCCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGACC 3069 GGCACCCAATGACAAAAAATT ATCTTCTCCCCCATTTACGACC 3069 GGCACCCAATGACAAAAAAATT AATTTTGTCATTACGAGC 3060 TACATGAAAAACAGGCTCAATTGGGA TCCAATTCCTCCCCATTTACGACC 3060 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGACC 3060 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTTACGACC 3060 GCTCGCAAATGACAAAAAAAAAAAAAAAAAAAAAAAAAA		3049	AGGCGTCTCCAAACGTCCTTCTGT	ACAGAAGGACGTTTGGAGACGCCT
3052 GACTGTCTAACGGACGACGACG CGTCGTGTCGTCCGTTAGACAGTC 3053 AGCTGTTAGGACCCGACAACCGGT ACCGGTTGTCGGGTCCTAACAGCT 3054 TTGCGTAGTGTGGGCATTTCCTCT AGAGGAAATGCCCACACTACGCAA 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAAGCGCGCAT 3056 TTAAGGGCGTCCGCGTCTATTCAG CTGAATAGACGCGGACGCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTTAAAGGT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGATGAGCATCCGCA TGCGGATGCTCATACGTCGAACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCGGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGCCAGGAAT 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGACTAATTGGG CCCCCAATTGAGCCTGTTTTCATGTT 3068 GTTCCGCACATGACTAATTGGG CCCCCAATTGAGCCTGTTTTCATGTT 3069 GGCACCCAATACCACAAAAAAAAAAATTAAAAAACAAGCCTGAAACAAAACAAAAAAAA	20	3050	AGATGCTATCCTGAGTGGGCCTGC	GCAGGCCCACTCAGGATAGCATCT
3053 AGCTGTTAGGACCCGACAACCGGT ACCGGTTGTCGGGTCCTAACAGCT 3054 TTGCGTAGTGTGGGCATTTCCTCT AGAGGAAATGCCCACACTACGCAA 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAAGCGCGCAT 3056 TTAAGGGCGTCCGCGTCTATTCAG CTGAATAGACGCGGACGCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTTAAAGGT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGATGAGCATCCGCA TGCGGATGCTCATACGTCGAACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCGGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGG CCCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAAA TTCTTCTTCTGTGTGTGCGGAAC 3069 GGCACCCAATACCACGAACAAAATT AAAGATGGAGTTCGAAATGCCCCT		3051	ACAGGGTGAAGAGACCGTGGGATG	CATCCCACGGTCTCTTCACCCTGT
25 3055 ATGCGCGCTTCTTTCCTCT AGAGGAAATGCCCACACTACGCAA 3056 TTAAGGGCGTCCGCGTCTATTCAG CTGAATAGACGCGGACGCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTTAAAGGT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGTATGAGCATCCGCA TGCGGATGCTCATACGTCGAACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGACCGCAATGACAAAATT AATTTTGTCATTGCGGTGGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGCCAGGAAT 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAAA TTCTTCTTCGTGGTATTGGGGGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3052	GACTGTCTAACGGACGACGACG	CGTCGTGTCGTCCGTTAGACAGTC
25 3055 ATGCGCGCTTCTTTCCTTGATGTA TACATCAAGGAAAGAAGCGCGCAT 3056 TTAAGGGCGTCCGCGTCTATTCAG CTGAATAGACGCGGACGCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTAAAGGT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGTATGAGCATCCGCA TGCGGATGCTCATACGTCGAACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCAGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGCAGGAGGAGGAGGAATTGGAACAAAATTGAGAGCAGGAATGACAAAATGGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTTCATGT 3068 GTTCCGCACATGACTCAATTGGGG CCCCCAATTGAGCCTGTTTTCATGT 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3053	AGCTGTTAGGACCCGACAACCGGT	ACCGGTTGTCGGGTCCTAACAGCT
3056 TTAAGGGCGTCCGCGTCTATTCAG CTGAATAGACGCGGACGCCCTTAA 3057 ACCTTTAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTTAAAGGT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGTATGAGCATCCGCA TGCGGATGCTCATACGTCGAACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCGGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3054	TTGCGTAGTGTGGGCATTTCCTCT	AGAGGAAATGCCCACACTACGCAA
3057 ACCTITAAACTTGTACCGCGGCCC GGGCCGCGGTACAAGTTTAAAGGT 3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGTATGAGCATCCGCA TGCGGATGCTCATACGTCGAACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCGGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 356 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT	25	3055	ATGCGCGCTTCTTTCCTTGATGTA	TACATCAAGGAAAGAAGCGCGCAT
3058 AGGGATGCAGAGGCACCACATGTT AACATGTGGTGCCTCTGCATCCCT 3059 CGGTTCGACGTATGAGCATCCGCA TGCGGATGCTCATACGTCGAACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCGGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAAGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3056	TTAAGGGCGTCCGCGTCTATTCAG	CTGAATAGACGCGGACGCCCTTAA
3059 CGGTTCGACGTATGAGCATCCGCA TGCGGATGCTCATACGTCGAACCG 3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCGGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3057	ACCTTTAAACTTGTACCGCGGCCC	GGGCCGCGGTACAAGTTTAAAGGT
3060 CAGGGCGATAGTCACATGGAGGTT AACCTCCATGTGACTATCGCCCTG 3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCGGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3058	AGGGATGCAGAGGCACCACATGTT	AACATGTGGTGCCTCTGCATCCCT
3061 GCTTGACTGCCCCGTTTCATATGT ACATATGAAACGGGGCAGTCAAGC 3062 CGAAGGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCGGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3059	CGGTTCGACGTATGAGCATCCGCA	TGCGGATGCTCATACGTCGAACCG
3062 CGAAGGGTTGTGCAATTACCCGA TCGGGTAATTGCACAACCCCTTCG 3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCGGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 35 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT	30	3060	CAGGGCGATAGTCACATGGAGGTT	AACCTCCATGTGACTATCGCCCTG
3063 AAAACGCACCGCAATGACAAAATT AATTTTGTCATTGCGGTGCGTTTT 3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3061	GCTTGACTGCCCCGTTTCATATGT	ACATATGAAACGGGGCAGTCAAGC
3064 ATTCCTGGACAAGACCCTCAACCG CGGTTGAGGGTCTTGTCCAGGAAT 3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3062	CGAAGGGGTTGTGCAATTACCCGA	TCGGGTAATTGCACAACCCCTTCG
3065 CCTACCTGCCTGCTAGCGGTGAGG CCTCACCGCTAGCAGGCAGGTAGG 3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3063	AAAACGCACCGCAATGACAAAATT	AATTTTGTCATTGCGGTGCGTTTT
3066 GCTCGTAAATGGGGAGGAATTGGA TCCAATTCCTCCCCATTTACGAGC 3067 ACATGAAAACAGGCTCAATTGGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3064	ATTCCTGGACAAGACCCTCAACCG	CGGTTGAGGGTCTTGTCCAGGAAT
3067 ACATGAAAACAGGCTCAATTGGGG CCCCAATTGAGCCTGTTTTCATGT 3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT	35	3065	CCTACCTGCCTGCTAGCGGTGAGG	CCTCACCGCTAGCAGGCAGGTAGG
3068 GTTCCGCACATGGATTGAGGTCTC GAGACCTCAATCCATGTGCGGAAC 3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3066	GCTCGTAAATGGGGAGGAATTGGA	TCCAATTCCTCCCCATTTACGAGC
3069 GGCACCCAATACCACGAAGAAGAA TTCTTCTTCGTGGTATTGGGTGCC 40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3067	ACATGAAAACAGGCTCAATTGGGG	CCCCAATTGAGCCTGTTTTCATGT
40 3070 AGGGGCATTTCGAACTCCATCTTT AAAGATGGAGTTCGAAATGCCCCT		3068	GTTCCGCACATGGATTGAGGTCTC	GAGACCTCAATCCATGTGCGGAAC
7.000007.100007.1007.1007.1007.1007.100		3069	GGCACCCAATACCACGAAGAAGAA	TTCTTCGTGGTATTGGGTGCC
3071 CATCATCACAAAGGAACGTCGGTG CACCGACGTTCCTTTGTGATGATG	40	3070	AGGGCATTTCGAACTCCATCTTT	AAAGATGGAGTTCGAAATGCCCCT
57.707.707.707.707.7007.7007.7007.7007.		3071	CATCATCACAAAGGAACGTCGGTG	CACCGACGTTCCTTTGTGATGATG

3073   CCCCAGGCGTAATGCACCACATAG				
3074   GCAGGTCGAACGCTAGTGGTTGAA		3072	TAAAGACCCACCGTCAGCAGCAGC	GCTGCTGACGGTGGGTCTTTA
3075 GGAACTTAGGAGTTCACGTCGCCA 3076 GCAGATACGGCTAGCTGAGGTGGC 3077 CACAGGCCTAGAGCTGAGGTGGC 3077 CACAGGCCTAGAGCTCAGCTTC 3078 GTTTTGCGCCGCTAGAGGTTCATTA 3078 GTTTTGCGCCGCATGAGGTTCATTA 3079 TTGCGCCTGATGCCAGCGTTCATTA 3079 TTGCGCCTGATGCCAGCGAGGTTCATTA 3079 TTGCGCCTGATGCCAGCAGAGATATA 3080 GATATCAGGCTTTCCCACTGCCGC GCGGAGTGGGAAAACCCATTGAA 3080 GATATCAGGCTTTCCCACTGCCGC GCGGAGTGGGAAAGCCTGATAT 3081 TGCGCCGAGAGAGAGTCTATGAA 3082 CATTGGTGTTGGCTGAGAGTTGAAC 3082 CATTGGTTTGGCTCACCAGGAG 3082 CATTGGTTTGGCCACCAGGAG 3083 GTCGGCACCATTAATAA 3083 GTCGGCACTTGGGCCACCATTAATA 3084 ATCGATCGGTGTCTCACCACGGAG 3085 CGTAGCCTTCCACCAGGAG 3086 CGCTCCCGTGTGGATAG 3087 TCGCCCCAGCCAAGGATTATTTGC 3088 TCCTTTGCAACGAGAACTGTGCTC 3088 TCCTTTGCAACGAGATTATTTGC 3089 GCCAAATTAACCACTGTC 3089 GTCCTGGAACAGCGGAGACTTATTGCACCACGGAGAGCTTCCACCAGGAGAGCTTCCAGCCAACACAAATTGG 3090 GCCAAATTAACGGGGCTCGTAATC 3090 GCCAAATTAACCACCGTTCCACCGTCTCAGCACAGAGCCGATATTTTGGC 3091 CCATTTGTTGAACAGACGGAGGGTGTTA 3092 TGGTCAAAAAGAGCACGATCCAAGGA 3092 TGGTCAAAAAGAGCACGATCCAAGGA 3093 CGCTACTAAGACGGAACCTGACCACAGGA 3094 CCATTCTTGCAAGGAGGGAGGGCC 3095 CCGCGGAAGAGACGGACCGATCCAAGGA 3096 CATACCTCCCGCTTGTATC 3097 AGGAGTACCACAGGAGGAGGAGCC 3098 CATACCTCCCGCTTGATTCACA 3099 CGCTACTAAGACGCCCCTTCACC 3099 CATACCTCCCGCTTGATTCACA 3099 CGCTACTAAGACGGCACCATCCAAGA 3099 CGCTACTAAGACGCCCCTTCCAC 3099 CATACCTCCCGCTTGATTCACA 3099 CGCTACAAAAGAGCACGAACCGAACCGAACCGAACCGAA		3073	CCCCAGGCGTAATGCACCACATAG	CTATGTGGTGCATTACGCCTGGGG
5 3076 GCAGATACGCTAGCTGAGGTGGC GCCACCTCAGCTAGCCGTATCTGG 3077 CACAGGCCTAGAGCCTCGGCGTTC GAACGCCGAGGCTCTAGGCCTGT 3078 GTITTGCGCGCATGAGGTTCATTA TAATGAACCTCATGCCGCGCAAAAC 3079 TTGCGCCTGATGCCAGCAGTACTA TAGTACTGCTGGCACCAAAAC 3080 GATATCAGGCTTTCCCACTGCCGC GCGCAGTGCGAAAAGCCTGATATA 3081 TGCGCGGAGACGGAGATCTATGAA TTCATAGATCTCCGTCTCCGCGCA 3082 CATTGGTGTTGGCTAGAGATGGAC GTCCACTCTCAGCCAACACCAATG 3083 GTCGGCACTTGGGCACCATTAATA TATTAATGATCTCCCACTGCCGCA 3084 ATCGATCGGTGTCCACCACGGAG CTCCACTCCAGCAACACCAATG 3085 CGTAGCCTTCCACCACGGAG CTCCTCTAGACACCACTAGTATAGAACCCTCTCAGCCAACACCAATG 3086 CGCTCTCCGTCTGAGAGAAAAGGGG CCCCTTTTCCTCAGACAGCGAGAGACCCATTGAGAAGACCCATTGAAAAACACACAATGAAAAAAAA		3074	GCAGGTCGAACGCTAGTGGTTGAA	TTCAACCACTAGCGTTCGACCTGC
3077 CACAGGCCTAGAGCCTCGGCGTTC 3078 GTTTTGCGCGCATGAGGTTCATTA TAATGAACCTCATGCCGCGCAAAAAC 3079 TTGCGCCTGATGCCAGCAGTACTA TAGTACTGCTGGCATCAGGCGCAAAAC 3080 GATATCAGGCTTTCCCACTGCCG GCGGCAGTGGGAAAGCCTGATTACATAGATCTCCGTCTCCGCGCGCAAAACCTGATGAA TTGCTAGATCTCCGTCTCCGCGCAAAACCTGATGAA TTGCTAGATCTCCGTCTCCGCGCAAAACCATGAA TTGCTAGATCTCCGTCTCCGCGCAAAACCAATGAA TTGCTAGATCTCCGTCTCCGCGCAAAACACCAATGAA TTGCTAGATCTCCAGCCAAACACCAATGAAAAAAAAAA		3075	GGAACTTAGGAGTTCACGTCGCCA	TGGCGACGTGAACTCCTAAGTTCC
3078 GTTTTGCGCGCATGAGGTTCATTA TAATGAACCTCATGCGCGCAAAAC 3079 TTGCGCCTGATGCCAGCAGTACTA TAGTACTGCTGGCACTCAGCGCAAAAC 3080 GATATCAGGCTTTCCCACTGCCGC GCGGCAGTGGGAAAGCCTTGATAT 10 3081 TGCGCGGAGCGGAGATCTATGAA TTCATAGATCTCCGTCTCCGCGCAA 3082 CATTGGTGTTGGCTGAGAGTGGAC GTCCACTCCAGCCAACCAATG 3083 GTCGGCACTTGGGCACCATTAAAA TATAATGGTGCCCAAGCCAACCAATG 3084 ATCGATCGGTGTCACCACGGAG CTCCGTGGAAGACCCGATCGAT 3085 CGTAGCCTTCCACCACGGAG CTCCTGTGGAAACACCAATG 3086 CGCTCCCGTTGAGAAAAGGG CCCCTTTTCCTCAGACGGAGGCCAA 3087 TCGCCCAGCCAAGGATATATTG CAATATATCCTTGGCTGGGAGGCCAA 3089 CGCCCAAGCAAAAATATATCTTTCAGAACAGGTGGAGGCCAA 3089 GTCCTGGACAGGAAAAGGGG CCCCTTTCCTTGCCAGAGAGACACACAAATATACCTTTGGCTGGAGAGCAAAATATACCTTTGCAAGAGAAAATAGGAGAAAAAAAA	5	3076	GCAGATACGGCTAGCTGAGGTGGC	GCCACCTCAGCTAGCCGTATCTGC
3079 TTGCGCCTGATGCCAGCAGTACTA 3080 GATATCAGGCTTTCCCACTGCCGC 3080 GATATCAGGCTTTCCCACTGCCGC 3081 TGCGCGGAGACGGAGATCTATGAA 3082 CATTGGTGTTGGCTGAGAGTGGAAC 3082 CATTGGTGTTGGCTGAGAGTGGAC 3083 GTCGCACTTTGGCTCACCACTGCACACACCCAATG 3084 ATCGATCGGTGTCCACCACTGATATA 3085 CGTAGCCTTTGGCTCACCACGGAC 3086 CGCTCTCCACCACTGGACACCCATTAATA 3086 CGCTCTCCACCACTGGACACCCATTGATA 3087 TCGCCCCAGCCAAGGATATATT 3088 CGCTCTCCGTCTGAGAAAAGGGC 3088 TCTCTTCCACCACTGGACACCCACTCGACACCACACCGATCGAT		3077	CACAGGCCTAGAGCCTCGGCGTTC	GAACGCCGAGGCTCTAGGCCTGTG
3080 GATATCAGGCTTTCCCACTGCCGC GCGGCAGTGGGAAAGCCTGATATT 3081 TGCGCGGAGACGGAGATCTATGAA TTCATAGATCTCCGTCTCCGCGCA 3082 CATTGGTGTTGGCTGAGAGTGGAC GTCCACTCTCAGCCAACACCAATG 3083 GTCGGCACTTGGGCACCATTAATA TATTAATGGTGCCCAACACCAATG 3084 ATCGATCGGTGTCTCACCACGAGAG CTCCGTGGAGAACACCGATCGAT 3085 CGTAGCCTTCCACCACGAGAG CTCCGTGGAGAACACCGATCGAT 3086 GGCTCTCCTCTGAGGAAAAAGGGG CCCCTTTTCCAGACAGGAGAGCC 3087 TCGCCCCAGCCAAGGAATATATTGC GCAATATATCCTTGGCTGGGGCCGA 3088 TCTCTTGCAAGGAACTCTGCCGTC GACGGCAGAGTTCCTTGCAAGAGA 3089 GTCCTGGACAAGAGATATATTGC GCAATATATCCTTGGCTGGGGCCGA 3090 GCCAAATTAACGGGGCTCGTAATC GATTACGAGCCGCGTTAATTTTGGC 3091 CCAATTTGACCGATGGGAGGGG 3092 TGGTCAAAAGAGCACCATCCAGAA TCCTGGACCAGCACAACAAATGG 3093 CGCTACTAAGACGCCCCTTGTCCAC GTGGACCAGGGGGGGTTTT 3094 CATACCTCCCGCTTGGATTCACA TTGTAGATCCAAGCGGGAGGTTTC 3095 CCGCGGAAGGATTCATTCACAG TCTGAACAAATGGCCCCCTTGTCCAC 3096 CACGGGACATTCATCACAA TTGTAGATCCAAGCGGGAGGTTTC 3097 AGGACTCACACCACTCCGCACAAAAA TTTTTGTGCGGGGCGA 3098 TCATGACCACCCCCATCCCAC ATGGACAGCGGGAGGTATC 3099 GGTAAGGAGCACCACTCCACCACCACCACCACACAAAA 3098 TCATGACCACCCCCATCCCGCACAAAA TTTTTGTGCGGAGTGGGACGTGTCACAA 3099 AGGATCACCCACTCCGCACAAAA TTTTTGTGCGGAGTGGGTGCGTTCATCAA 3099 GGTAAGGAGCACCACTCCGCCCACAAAA TTTTTTTTTTT		3078	GTTTTGCGCGCATGAGGTTCATTA	TAATGAACCTCATGCGCGCAAAAC
10 3081 TGCGCGGAGACGGAGATCTATGAA TTCATAGATCTCCGTCTCCGCGCAA 3082 CATTGGTTGGCTGAGAGTGGAC GTCCACTCTCAGCCAACACCAATG 3083 GTCGGCACTTGGGCACCATTAATA TATTAATGGTGCCCAACACCCAATG 3084 ATCGATCGGTGTCTCACCACGGAG CTCCGTGGTGAGACACCCGATCGAT 3085 CGTAGCCTTCCACCACGGAG CTCCGTGGTGAGACACCCGATCGAT 3086 CGCTCTCCGTCTGAGGAAAAGGGG CCCCTTTTCCTCAGACGGAGGCCAC 3087 TCGCCCCAGCCAAGGATATATTGC GCAATATATCCTTGGCTGGGGCGA 3088 TCTCTTGCAAGGAAACTCTGCCGTC GACGGCAGAGTTCCTTGAAGAGG 3089 GTCCTGGACAGAGACTCTGCCGTC GACGGCAGAGTTCCTTGCAGACGAGACC 3089 GCCAAATTAAGCGGGCTCGTAATC GATTACGACCCCCGTCTAATTTGGC 3090 CCCATTTTGTTGACCAATGGGAGGGG CCCCTCCCATCGGTCAACAAATGG 3091 CCATTTGTTGACCAATGGGAGGGG CCCCCTCCCATCGGTCAACAAATGG 3092 TGGTCAAAAGAGCACCATCAGGA TCCTGGATCGTCTTTTTGACCA 3093 CGCTACTAAGACGCCCCCTTCCAC GTGGACAGGGGGGGGGAGGTTC 3094 CATACCTCCCGCTTGGATTCACA TTGTAGATCAAGCGGGGAGGTATC 3095 CCGCGGAAGGAATGTCATCAAA TTGTAGATCACACTCTCCGCGG 3096 CACGGGAAGGAATGTCATCAAA TTGTAGATGAACATTCCTTCCGCGG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTTGCGCGAGTGAACCAATTGCCTCGGT 3098 TCATGACAGCGCCCCTTTCACA TTGTAGATGAATCAACTCCCTGC 3099 GTAGGGGACATTCATTCACAAA TTTTTTTTTTTTTTTT		3079	TTGCGCCTGATGCCAGCAGTACTA	TAGTACTGCTGGCATCAGGCGCAA
3082 CATTGGTGTGGCAGAGTGGAC 3083 GTCGGCACTTGGGCACCATTAATA TATTAATGGTGCCCAACACCCAATG 3084 ATCGATCGGTGTCTCACCACGGAG CTCCGTGGTGAGACACCCGATCGAT 3085 CGTAGCCTTCCACCACGGAG CTCCGTGGTGAGACACCCGATCGAT 3086 CGCTCTCCGTCTGAGGAAAAGGGG CCCCTTTTCCTCAGACGGAGAGCC 3087 TCGCCCCAGCCAAGGATATATTGC GCAATATATCCTTGGCTGGGCGAA 3088 TCTCTTGCAAGGAACTCTGCCGTC GACGGCAGAGTTCCTTGCAAGACGAAGACCC 3088 TCTCTTGCAAGGAACTCTGCCGTC GACGGCAGAGTTCCTTGCAAGACA 3089 GTCCTGGACAGACAGGAGGGTGTTA TAACACCCTCCGTCTGTCCAAGACA 3090 GCCAAATTAAGCGGGCTCGTAATC GATTACGAGCCCGCTTTAATTTGGC 3091 CCATTTGTTGACCGATGGGAGGGG CCCCTCCCATCGGTCAACAAATTGG 3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTCTTTTGACCA 3093 CGCTACTAAGACGCCCCTTTCCAC GTGGACAGGACGGAGGTATC 3094 CATACCTCCCGCTTTGATTC CAGTGAATCCAAGCGGGAGGTATC 3095 CCCCGGAAAGGAATGTCATCACAA TTGTACATGACACTTCCTCCGCGG 3096 CACGGGACATTCATTCACAGACC CGTCCTTGTACTACGCGGACAGAATTCATCAAGAGACACATTCCTTCC		3080	GATATCAGGCTTTCCCACTGCCGC	GCGGCAGTGGGAAAGCCTGATATC
3083 GTCGGCACTTGGGCACCATTAATA TATTAATGGTGCCCAAGTGCCGAC 3084 ATCGATCGGTGTCTCACCACGGAG CTCCGTGGTGAGACACCGATCGAT 3085 CGTAGCCTTCCACCGTGTCGATAG CTATCGACACGGTGGAAGGCTACC 3086 CGCTCTCCGTCTGAGGAAAAGGGG CCCCTTTTCCTCAGACGGAGAGCC 3087 TCGCCCCAGCCAAGGATATATTGC GCAATATATCCTTGGCTGGGGCGA 3088 TCTCTTGCAAGGAACTCTGCCGTC GACGGCAGAGTTCCTTGGCTGGGGCGA 3089 GTCCTGGACAGCAGAGGGTGTTA TAACACCCTCCGTCTGTCCAGGAC 3090 GCCAAATTAAGCGGGCTCGTAATC GATTACGAGCCCGCTTAATTTGGC 3091 CCATTTGTTGACCGATGGGAGGGG CCCCTCCCATCGGTCAACAATTGG 3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTGTCTAAGCAC 3093 CGCTACTAAGACGCCCCTGTCCAC GTGGACAGGGGGGGGGG	10	3081	TGCGCGGAGACGGAGATCTATGAA	TTCATAGATCTCCGTCTCCGCGCA
3084 ATCGATCGGTGTCTCACCACGGAG CTCCGTGGTGAGACACCGATCGAT 3085 CGTAGCCTTCCACCGTGTCGATAG CTATCGACACGGTGGAAGGCTACC 3086 CGCTCTCCGTCTGAGGAAAAGGGG CCCCTTTTCCTCAGACGGAGAGCCG 3087 TCGCCCCAGCCAAGGATATATTGC GCAATATATCCTTGGCTGGGGCGA 3088 TCTCTTGCAAGGAACTCTGCCGTC GACGGCAGAGTTCCTTGCAAGAGA 3089 GTCCTGGACAGACGGAGGGTGTTA TAACACCCTCCGTCTGTCCAGGACA 3090 GCCAAATTAAGCGGGCTCGTAATC GATTACGAGCCCGCTTAATTTGGC 3091 CCATTTGTTGACCGATGGAGGGG CCCCTCCCATCGGTCAACAAATGG 3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTCACAACAAATGG 3093 CGCTACTAAGAGCACCATCCAGGA TCCTGGATCGTGCTTAGTAGCC 3094 CATACCTCCCGCTTGGATTCACTG CAGGAACGGGGGGGGTTTAGTAGCC 3095 CCGCGGAAGGAATGTCATCTACAA TTGTAGATGAACTCCTTCCGCGG 3096 CACGGGACATTCATTCACAA TTGTAGATGAACTTCCTTCCGCGG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTTGTCGGGAGGGGGGTGTCCTT 3098 TCATGACAGCGCCCCCTACCAT ATGGTATGGGGTGGCTCCTTCGT 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCACCACTCCGCACAAAA TTTTTGTCGGGGTGGTCACTCCC 3101 ACGGAGGAGCACTCCTTCCGCTG 3101 ACGGAGGAGCACTCCTTCCGCTG 3102 GAAGTCTGTCGCTG CAGCACACACATCCCTCCCCCCCCCC		3082	CATTGGTGTTGGCTGAGAGTGGAC	GTCCACTCTCAGCCAACACCAATG
3085 CGTAGCCTTCCACCGTGTCGATAG CTATCGACACGGTGGAAGGCTACC 3086 CGCTCTCCGTCTGAGGAAAAGGGG CCCCTTTTCCTCAGACGGAGAGCCG 3087 TCGCCCCAGCCAAGGATATATTGC GCAATATATCCTTGGCTGGGGCCAA 3088 TCTCTTGCAAGGAACTCTGCCGTC GACGGCAGAGTTCCTTGCAAGACA 3089 GTCCTGGACAGACGGAGGGTGTTA TAACACCCTCCGTCTGTCCAGGAC 3090 GCCAAATTAAGCGGGCTCGTAATC GATTACGAGCCCGCTTAATTTGGC 3091 CCATTTGTTGACCGATGGGAGGG CCCCTCCCATCGGTCAACAAATGG 3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTCTTTTTGACCAA 3093 CGCTACTAAGACGCCCCTGTCCAC GTGGATCGAGCGTTTAATTGGC 3094 CATACCTCCGCTTTGGATTCACTG CAGTGAATCCAAGCGGGAGGTATC 3095 CCGCGGAAGGAATTCATTCACAA TTGTAGATGCACTTCCTCCGCGG 3096 CACGGGAAGGAATGTCATCTACAA TTGTAGATGAATTCCTTCCGCGG 3097 AGGAGTCACCACTCCGCACAAAA TTTTTGCGGAGTGGACTCCTT 3098 TCATGACAGCGCCCCCTACCAT ATGGTATGGGTGGACTCCTT 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACCACACAA TTTTTTGCGGGTGGCTGCTCACC 3101 ACGGAAGGACCACCCCATACCAT ATGGTATGGGGTGACTCCTTCGAGAGAGACATTCCTTCCGCGGGAGGTATCCACCCCCCTTCCCCCCCC		3083	GTCGGCACTTGGGCACCATTAATA	TATTAATGGTGCCCAAGTGCCGAC
15 3086 CGCTCTCGTCTGAGGAAAAGGGG CCCCTTTTCCTCAGACGGAGAGCGC 3087 TCGCCCCAGCCAAGGATATATTGC GCAATATATCCTTGGCTGGGCGAA 3088 TCTCTTGCAAGGAACTCTGCCGTC GACGGCAGAGTTCCTTGCAAGAGA 3089 GTCCTGGACAGACGAGGAGGTGTTA TAACACCCTCCGTCTGTCCAGGAC 3090 GCCAAATTAAGCGGGCTCGTAATC GATTACGAGCCCGCTTAATTTGGC 3091 CCATTTGTTGACCGATGGGAGGGG CCCCTCCCATCGGTCAACAAATGG 3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTCCTTTTTGACCA 3093 CGCTACTAAGACGCCCCTGTCCAC GTGGACAGGGGCGTCTTAGTAGCC 3094 CATACCTCCCGCTTGGATTCACC GTGGACAGGGGCGTCTTAGTAGCC 3095 CCGCGGAAGGAATGTCATCACAA TTGTAGATGACATTCCTTCCGCGG 3096 CACGGGACATTCATTCACAA TTGTAGATGACATTCCTTCCGCGG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTTTGTGCGAATGACATTCCTT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGGACTCCTT 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGTCATCACCA 3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGC 3102 GAAGTCTGTGCCGGTGGACGAC GTCCGTCACCGGCACACACAT 3103 CCGTAACGTGATTCGGCGG CCGCTACCGTCCCCCTCCCGC 3104 CGTGGAAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCCGCGGAACGACTTCCCCCCACCCCATACCAT ATGGTTAGAGCGCCCCTTCCCCGCACGAACACATCCGTTCCGCGCGCG		3084	ATCGATCGGTGTCTCACCACGGAG	CTCCGTGGTGAGACACCGATCGAT
TCGCCCCAGCCAAGGATATATTGC  GCAATATATCCTTGGGTGGGGCGA  3088 TCTCTTGCAAGGAACTCTGCCGTC GACGGCAGAGTTCCTTGCAAGAGA  3089 GTCCTGGACAGACGGAGGGTGTTA TAACACCCTCCGTCTGTCCAGGAC  3090 GCCAAATTAAGCGGGCTCGTAATC GATTACGAGCCCGCTTAATTTGGC  3091 CCATTTGTTGACCGATGGGAGGGG CCCCTCCCATCGGTCAACAAATGG  3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTCCTTTTTGACCA  3093 CGCTACTAAGACGCCCCTGTCCAC GTGGACAGGGGCGTCTTAGTAGCC  3094 CATACCTCCCGCTTGGATTCACTG CAGTGAATCCAAGCGGGAGGTATC  3095 CCGCGGAAGGAATGTCATCTACAA TTGTAGATGACATTCCTTCCGCGG  3097 AGGAGTCACCCACTCCGCACAAAA TTTTTGTGCGGAGTGGAGCTCCTTCCAC  3098 TCATGACACCCCACTCCGCACAAAA TTTTTGTGCGGAGTGGGTGACTCCT  3099 GGTAGGGGACTATCATCGTCCTC  3100 ATGTCTCACTACCCACTCCGCACAAAA TTTTTGTGCGGAGTGGGTGACACAT  3099 GGTAGGGGACTATCGATCGTCTC  3100 ATGTCTCACTACCCACTCGCCACACACA TGGTATGGGGTGCCTCTCCCC  3101 ACGGAGGAGCGACTCGTTCGCTG CCGCTACGTAGGACACTCCCTCCCC  3102 GAAGTCTGTCGCCGGTTGGACGAC CCGCTACCGTCCGCACAAAAA TGCTCCACCCGCACCACACAC  3101 ACGGAGGAGCGACTCGTTCGCTGC CAGCACGATCGATAGCCCCCTTCCCC  3102 GAAGTCTGTCGCCGGTTGGACGGAC CCGCTCACCGGCGCACAGACTTCCCCCCCCCC		3085	CGTAGCCTTCCACCGTGTCGATAG	CTATCGACACGGTGGAAGGCTACG
3088 TCTCTTGCAAGGAACTCTGCCGTC GACGGCAGAGTTCCTTGCAAGAGA 3089 GTCCTGGACAGACGGAGGGTGTTA TAACACCCTCCGTCTGCCAGGAC 3090 GCCAAATTAAGCGGGCTCGTAATC GATTACGAGCCCGCTTAATTTGGC 3091 CCATTTGTTGACCGATGGGAGGGG CCCCTCCCATCGGTCAACAAATGG 3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTCTTTTTGACCA 3093 CGCTACTAAGACGCCCCTGTCCAC GTGGACAGGGGCGTCTTTGTAGCCA 3094 CATACCTCCCGCTTGGATTCACTG CAGTGAATCCAAGCGGGAGGTATC 3095 CCGCGGAAGGAATGTCATCTACAA TTGTAGATGACATTCCTTCCGCGG 3096 CACCGGAACGATTCATTCACAA TTGTAGATGACATTCCTTCCGCGG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTTGTGCGAGTGGGTGACTCCTT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGGCTGTCATGA 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGTGAGACAT 3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACACGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGACG CGCTCCTCCGAATACACGTTACGG 3104 CGTGGAACGCGACTCGTTCGCTG ACGATCGATAGTCCCCTCCG 3105 GGCATGGGCTATCCCCACACTAG CTAGTGTAAGTCGCTTCCACG 3106 GGCATGGCTATCCCCACACTAG CTAGTGTGAGGCAATACACGTTACGG 3107 AATGGTCGCGCACACACTCGTTCGT 3108 CTGGATTCGGCGCAACACATACATCGT ACGAACGATGCTGAAATACACCCTTCCACG 3109 CGCAAAAACACCCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTCCAACAGAT TCTTTCACGGTTTGCCCGAACCGATCCACTAG 3109 CGCAAAAACACCCGTAACAAA TTCTTACGGTTTTTCGCCGAACCAATCCAG 3109 CGCAAAAACACCCGTAACCATTT AAACGTTGGACGACCCAATCCAG 3109 CGCAAAAACACCCGTAACAAA TTCTTACGGTTTTTCGCAAATACCACTCAG 3109 CGCAAAAACACCCGTAACAAA TTCTTACGGTTTTTTCACCAATCCAG 3109 CGCAAAAACACCCGTAACAAA TTCTTACGGTTTTTTTTTT	15	3086	CGCTCTCCGTCTGAGGAAAAGGGG	CCCCTTTCCTCAGACGGAGAGCG
3089 GTCCTGGACAGACGGAGGGTGTTA TAACACCCTCCGTCTGTCCAGGAC 3090 GCCAAATTAAGCGGGCTCGTAATC GATTACGAGCCCGCTTAATTTGGC 3091 CCATTTGTTGACCGATGGGAGGG CCCCTCCCATCGGTCAACAAATGG 3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTGCTCTTTTGACCA 3093 CGCTACTAAGACGCCCCTGTCCAC GTGGACAGGGGGCGTCTTAGTAGCC 3094 CATACCTCCCGCTTGGATTCACTG CAGTGAATCCAAGCGGGAGGTATC 3095 CCGCGGAAGGAATGTCATCTACAA TTGTAGATGACATTCCTTCCGCGG 3096 CACGGGACATTCATTCACAGGACG CGTCCTGTGAATGAATGTCCCGTG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTTGTGCGAGTGGATCCCTT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGCCTGTCATGA 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGTGAGACAT 3011 ACGGAGGAGCGACTCGTTCGCTGC GCAGCAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCACAGGACGACTTCCACG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTAAGTCCCCTACCG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCAATACACGTTACGG 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGCACAGCCC 3107 AATGGTCGCCGAAAACCGTAAGAAT ATTCTTACGGTTTGCCCAACCATGCC 3108 CTGGATTCGGTACGTCCAACCATTCGT ACGAACGATGCTGAAATACACCTTTCCACG 3109 CGCAAAAACACCCGTAAGAAT ATTCTTACGGTTTGCCGCAACCATTCAGG 3109 CGCAAAAACACCCGTAGCCAACAAA TTCTTTGCGCTACCGGGTGTTTTTTCGCGAATACCAGTTTTTCAGCATCCAACGTTTTTTTT		3087	TCGCCCAGCCAAGGATATATTGC	GCAATATATCCTTGGCTGGGGCGA
3090 GCCAAATTAAGCGGGCTCGTAATC GATTACGAGCCCGCTTAATTTGGC 3091 CCATTTGTTGACCGATGGGAGGG CCCCTCCCATCGGTCAACAAATGG 3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTGCTCTTTTGACCA 3093 CGCTACTAAGACGCCCCTGTCCAC GTGGACAGGGGCGTCTTAGTAGCC 3094 CATACCTCCCGCTTGGATTCACTG CAGTGAATCCAAGCGGGAGGTATC 3095 CCGCGGAAGGAATGTCATCTACAA TTGTAGATGACATTCCTTCCGCGG 3096 CACGGGACATTCATCACAA TTGTAGATGACATTCCTTCCGCGG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTTGTGCGAGTGGGTGACTCCT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGGGTGACTCCT 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGGACCATACACT 3101 ACGGAGGACGACTCGTTCGCTGC GCAGCGAACGAGTCGTCTCCCGTG 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCACCGGCGACAGACTTC 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCCTTCCCG 3105 GGCATGGCTATTCCGACGAGCG CTAGTTGGTTAAGTCGCCTTCCACG 3106 GGGTCGTATTTCAGCACTAGT ACGATTGGTTAAGTCGCCATGCC 3107 AATGGTCGCCGAAAACCGTAACAACTTTCAGAACGACTTCCACGATAGAATACACCCATGCC 3107 AATGGTCGCCGAAAACACGTTAACAATAACAACCCC 3107 AATGGTCGCGCAAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATTCAGATACACCCCTTCCACGAATACACGCCCATGCC 3107 AATGGTCGCGCAAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACCTACCGAATCCAG 3109 CGCAAAAAACACCCGTAAGCAAT ATCTTTGGCTACAGAGTTTTTGCG 3110 TATGGATACCGTTTTTGGACTGGC GCCCAGTCCAAAAGCGTTTTTTTTTT		3088	TCTCTTGCAAGGAACTCTGCCGTC	GACGGCAGAGTTCCTTGCAAGAGA
20 3091 CCATTTGTTGACCGATGGGAGGG CCCCTCCATCGGTCAACAAATGG 3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTGCTCTTTTGACCA 3093 CGCTACTAAGACGCCCCTGTCCAC GTGGACAGGGGCGTCTTAGTAGCC 3094 CATACCTCCCGCTTGGATTCACTG CAGTGAATCCAAGCGGGAGGTATC 3095 CCGCGGAAGGAATGTCATCTACAA TTGTAGATTGACATTCCTTCCGCGG 3096 CACGGGACATTCATTCACAGACG CGTCCTGTGAATGAATGTCCCGTG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTTGTGCGAGTGGGTGACTCCT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGTTGGCTGCTTCATGA 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGATGAGTCGCTCTCCCGT 3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTTGAGGACATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACCGCTTCCACG 3107 AATGGTCGCCGAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTCCAACCGTTT AAACGTTGAGACGTACCCAATCCAG 3109 CGCAAAAACACCCGTAAGAAA TTCTTGCGCTGACGAACCGAATCCAG 3101 TATGGATACGCTTTTTGGACTGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTTCACGCTGGT ACCAGCGTGAAAGCGCGTTTTGAAGC		3089	GTCCTGGACAGACGGAGGGTGTTA	TAACACCCTCCGTCTGTCCAGGAC
3092 TGGTCAAAAGAGCACGATCCAGGA TCCTGGATCGTGCTCTTTTGACCA 3093 CGCTACTAAGACGCCCCTGTCCAC GTGGACAGGGGCGTCTTAGTAGCC 3094 CATACCTCCGCTTGGATTCACTG CAGTGAATCCAAGCGGGAGGTATC 3095 CCGCGGAAGGAATGTCATCTACAA TTGTAGATGACATTCCTTCCGCGG 3096 CACGGGACATTCATTCACAGGACG CGTCCTGGAATGAATGTCCCGTG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTGTGCGGAGTGGGTGACTCCT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGCGCTGTCATGA 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGTGAGACAT 3010 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACCGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCGAATACACGTTACGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGACATACACGTTACGG 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGCCATGCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACCAACGTTT 3108 CTGGATTCGTCACACGTTT 3109 CGCAAAAACCCCGTAGCCAAGAA TTCTTGGCTACCGAATCCAGTTTTTGCG 3110 TATGGATACCGTTTTTTTTTTTTTTTTTTTTTTTTTTTT		3090	GCCAAATTAAGCGGGCTCGTAATC	GATTACGAGCCCGCTTAATTTGGC
3093 CGCTACTAAGACGCCCCTGTCCAC GTGGACAGGGGCGTCTTAGTAGCC 3094 CATACCTCCCGCTTGGATTCACTG CAGTGAATCCAAGCGGGAGGTATC 3095 CCGCGGAAGGAATGTCATCTACAA TTGTAGATGACATTCCTTCCGCGG 3096 CACGGGACATTCATTCACAA TTGTAGATGACATTCCTTCCGCGG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTTGTGCGGAGTGACTCCT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGCGCTGTCATGA 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGTGAGACAT 3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGACG CGCTCGTCCGAATACACGTTACGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGACATACACGTTACGC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT 3108 CTGGATTCGTACCAACGTTT 3109 CGCAAAAACCCCGTAGCCAACAAA TTCTTGGCTACCGATTCCAGG 3110 TATGGATACCGTTTTTGGACTGGGC GCCCAGTCCAAAAGCGTTTTTTGCG 3111 GCTTCAAACGCGCTTCACCGTTGA ACCAGCGTGAAAGCCGTATTCCATA 40 3111 GCTTCAAACGCGCTTTCACGCTTGATACCAGCTTTTAAGCCGCTTTTAAGCCAGCGTTTTTTTGAACTAACCAATCCATA	20	3091	CCATTTGTTGACCGATGGGAGGGG	CCCCTCCCATCGGTCAACAAATGG
25 CCGCGAAGGAATGTCATCTACAA TTGTAGATGACATTCCTTCCGCGG 3095 CCGCGGAAGGAATGTCATCTACAA TTGTAGATGACATTCCTTCCGCGG 3096 CACGGGACATTCATTCACAGGACG CGTCCTGTGAATGAATGTCCCGTG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTTGTGCGGAGTGGGTGACTCCT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGCGCTGTCATGA 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGTGAGACAT 3011 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGACG CGCTCGTCCGAATACACGTTACGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTTTTTTTTTTTTTTTTTTTTTTTTT		3092	TGGTCAAAAGAGCACGATCCAGGA	TCCTGGATCGTGCTCTTTTGACCA
25 CCGCGGAAGGAATGTCATCTACAA TTGTAGATGACATTCCTTCCGCGG 3096 CACGGGACATTCATTCACAGGACG CGTCCTGTGAATGAATGTCCCGTG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTGTGCGAGTGGGTGACTCCT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGCGCTGTCATGA 3099 GGTAGGGGACTATCGATCGTGC CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGTGAGACAT 3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCGAATACACGTTACGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTTGGACTGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTTTGAAGCC		3093	CGCTACTAAGACGCCCCTGTCCAC	GTGGACAGGGGCGTCTTAGTAGCG
25 3096 CACGGGACATTCATTCACAGGACG CGTCCTGTGAATGAATGTCCCGTG 3097 AGGAGTCACCCACTCCGCACAAAA TTTTGTGCGGAGTGGGTGACTCCT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGCGCTGTCATGA 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGTGAGACAT 3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCACCGGCGACAGACTTC 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3107 AATGGTCGCGCAAACCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTGGACTGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGACGCGTTTGAAGCC		3094	CATACCTCCCGCTTGGATTCACTG	CAGTGAATCCAAGCGGGAGGTATG
3097 AGGAGTCACCCACTCCGCACAAAA TTTTGTGCGGAGTGGGTGACTCCT 3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGCGCTGTCATGA 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGTGAGACAT 30 3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCGAATACACGTTACGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGCACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3095	CCGCGGAAGGAATGTCATCTACAA	TTGTAGATGACATTCCTTCCGCGG
3098 TCATGACAGCGCACCCCATACCAT ATGGTATGGGGTGCGCTGTCATGA 3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGTGAGACAT 30 3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCGAATACACGTTACGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTGGACTGGCC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC	25	3096	CACGGGACATTCATTCACAGGACG	CGTCCTGTGAATGAATGTCCCGTG
3099 GGTAGGGGACTATCGATCGTGCTG CAGCACGATCGATAGTCCCCTACC 3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGTGAGACAT 3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCGAATACACGTTACGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTGGACTGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3097	AGGAGTCACCCACTCCGCACAAAA	TTTTGTGCGGAGTGGGTGACTCCT
3100 ATGTCTCACTACCGCACGTAGCGG CCGCTACGTGCGGTAGTGAGACAT 3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCACAGTTACAGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3098	TCATGACAGCGCACCCCATACCAT	ATGGTATGGGGTGCGCTGTCATGA
3101 ACGGAGGAGCGACTCGTTCGCTGC GCAGCGAACGAGTCGCTCCTCCGT 3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCGAATACACGTTACGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3099	GGTAGGGGACTATCGATCGTGCTG	CAGCACGATCGATAGTCCCCTACC
3102 GAAGTCTGTCGCCGGTGGACGGAC GTCCGTCCACCGGCGACAGACTTC 3103 CCGTAACGTGTATTCGGACGACGC CGCTCGTCCGAATACACGTTACGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3100	ATGTCTCACTACCGCACGTAGCGG	CCGCTACGTGCGGTAGTGAGACAT
3103 CCGTAACGTGTATTCGGACGAGCG CGCTCGTCCGAATACACGTTACGG 3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTGGACTGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC	30	3101	ACGGAGGAGCGACTCGTTCGCTGC	GCAGCGAACGAGTCGCTCCTCCGT
3104 CGTGGAAGCGACTTAACCAATCGT ACGATTGGTTAAGTCGCTTCCACG 3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3102	GAAGTCTGTCGCCGGTGGACGGAC	GTCCGTCCACCGGCGACAGACTTC
3105 GGCATGGGCTATGCCTCACACTAG CTAGTGTGAGGCATAGCCCATGCC 3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3103	CCGTAACGTGTATTCGGACGAGCG	CGCTCGTCCGAATACACGTTACGG
3106 GGGTCGTATTTCAGCATCGTTCGT ACGAACGATGCTGAAATACGACCC 3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3104	CGTGGAAGCGACTTAACCAATCGT	ACGATTGGTTAAGTCGCTTCCACG
3107 AATGGTCGCGCAAACCGTAAGAAT ATTCTTACGGTTTGCGCGACCATT 3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3105	GGCATGGGCTATGCCTCACACTAG	CTAGTGTGAGGCATAGCCCATGCC
3108 CTGGATTCGGTACGTCCAACGTTT AAACGTTGGACGTACCGAATCCAG 3109 CGCAAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC	35	3106	GGGTCGTATTTCAGCATCGTTCGT	ACGAACGATGCTGAAATACGACCC
3109 CGCAAAACACCCGTAGCCAAGAA TTCTTGGCTACGGGTGTTTTTGCG 3110 TATGGATACGCTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3107.	AATGGTCGCGCAAACCGTAAGAAT	ATTCTTACGGTTTGCGCGACCATT
3110 TATGGATACGCTTTTGGACTGGGC GCCCAGTCCAAAAGCGTATCCATA 40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3108	CTGGATTCGGTACGTCCAACGTTT	AAACGTTGGACGTACCGAATCCAG
40 3111 GCTTCAAACGCGCTTCACGCTGGT ACCAGCGTGAAGCGCGTTTGAAGC		3109	CGCAAAAACACCCGTAGCCAAGAA	TTCTTGGCTACGGGTGTTTTTGCG
		3110	TATGGATACGCTTTTGGACTGGGC	GCCCAGTCCAAAAGCGTATCCATA
3112 TACAGCCCGCTCTACCTCGCCACC GGTGGCGAGGTAGAGCCCCCTCT	40	3111	GCTTCAAACGCGCTTCACGCTGGT	ACCAGCGTGAAGCGCGTTTGAAGC
THOUSED TO THE TOTAL TOT		3112	TACAGCCCGCTCTACCTCGCCACC	GGTGGCGAGGTAGAGCGGGCTGTA

	3113	TCAACCGATGTCAAAATGCACGTT	AACGTGCATTTTGACATCGGTTGA
	3114	AGCTCTCCCGAAGTAGGGCGGTA	TACCGCCCTACTTCGGAGAGAGCT
	3115	ACGCACACATGGAGACTTGGCTCC	GGAGCCAAGTCTCCATGTGTGCGT
	3116	TTCTTGAAAGCTAGTGGGGCGCTA	TAGCGCCCCACTAGCTTTCAAGAA
5	3117	CAATCACGGCTGGGCTATTCTGTG	CACAGAATAGCCCAGCCGTGATTG
	3118	GTGGCGACCCGTCGGTGAAAGAGT	ACTCTTTCACCGACGGGTCGCCAC
	3119	CGTCGAATGCCGAACCAGTTAAGT	ACTTAACTGGTTCGGCATTCGACG
	3120	TGCGTATTTGCATGCTCACAGCTG	CAGCTGTGAGCATGCAAATACGCA
	3121	CGCAGTTGGTTTGTGCACGGCTGC	GCAGCCGTGCACAACCAACTGCG
10	3122	GTTTTTCCGTGAAAACTGGCATCG	CGATGCCAGTTTTCACGGAAAAAC
	3123	ACAGGTTCCTCCACCACGATTTGA	TCAAATCGTGGTGGAGGAACCTGT
	3124	CTAGCGCGCTTTTAGGTCCTTGCG	CGCAAGGACCTAAAAGCGCGCTAG
	3125	CAAAATCAAAGGGATCAACCGGTG	CACCGGTTGATCCCTTTGATTTTG
	3126	AACGTAACCCCAGTGAGTCAGGCA	TGCCTGACTCACTGGGGTTACGTT
15	3127	TCAACCGGTGCACTTTAGAACGCC	GGCGTTCTAAAGTGCACCGGTTGA
	3128	ATCGCAAAGTTGCAGGCGAATACT	AGTATTCGCCTGCAACTTTGCGAT
	3129	ATATGTCCCTGGGTGCTGCACAAC	GTTGTGCAGCACCCAGGGACATAT
	3130	TGGCACTTTGTAGTGCTGCGGTGG	CCACCGCAGCACTACAAAGTGCCA
	3131	ACGCACGACGTCCTTCTAAGCTCG	CGAGCTTAGAAGGACGTCGTGCGT
20	3132	CCCACGTGCACTATAGGGATTTCG	CGAAATCCCTATAGTGCACGTGGG
	3133	CCGCGCTTGGTCAGTCATCCTTGC	GCAAGGATGACTGACCAAGCGCGG
	3134	AGCGGCTCAGGGAATAACAACAGG	CCTGTTGTTATTCCCTGAGCCGCT
	3135	ACAACGCGATCGGAGGCAACCAGT	ACTGGTTGCCTCCGATCGCGTTGT
	3136	AGCAATTGCCTCCGTAGAAACCCA	TGGGTTTCTACGGAGGCAATTGCT
25	3137	GAGTCGTGGCATCGCCTGCTATCG	CGATAGCAGGCGATGCCACGACTC
	3138	TCTATGCAAATACTGCGCTTGCGA	TCGCAAGCGCAGTATTTGCATAGA
	3139	TCAGCTTAAGTTACGGTGTGGCCG	CGGCCACACCGTAACTTAAGCTGA
	3140	TCCAAGGTCGAACAGGGATCAGAA	TTCTGATCCCTGTTCGACCTTGGA
·	3141	GTTAGGCTGGCGTCAATAGCGCTT	AAGCGCTATTGACGCCAGCCTAAC
30	3142	GGTGTCATAAGGAAGAGGGCATCG	CGATGCCCTCTTCCTTATGACACC
	3143	CCGGCGGCTAGATCAATATTTCT	AGAAATATTGATCTAGCCCGCCGG
	3144	CTAACGTCAAGTTTTACGCCCCGA	TCGGGGCGTAAAACTTGACGTTAG
	3145	GCAGCACAGTTTTCCGATTTGCGG	CCGCAAATCGGAAAACTGTGCTGC
	3146	CGCACGCAAGGGGAGGGATGACTG	CAGTCATCCCTCCCCTTGCGTGCG
35	3147	CGGGGCCGAAAAGGACGTCACAAG	CTTGTGACGTCCTTTTCGGCCCCG
	3148	TTCTCCAACACGGCTAACCGGTAG	CTACCGGTTAGCCGTGTTGGAGAA
	3149	TTACAGCCTGGCCCGAGGTAGTTG	CAACTACCTCGGGCCAGGCTGTAA
ĺ	3150	TTTCGGGCAGCATGAGTTATCGAA	TTCGATAACTCATGCTGCCCGAAA
ľ	3151	CTACTGGACGCCCTGCTTCGAAGT	ACTTCGAAGCAGGGCGTCCAGTAG
40	3152	GGTCGTCCGACGTGAAAAGACCAA	TTGGTCTTTTCACGTCGGACGACC
l	3153	GTTTTCGAGCTCTTTCTCCGCAGG	CCTGCGGAGAAAGAGCTCGAAAAC

3154	GCGTGAAGGTACCCAGTGTCACAG	CTGTGACACTGGGTACCTTCACGC
3155	TTTCTGAACGCTTCGACGCAACAC	GTGTTGCGTCGAAGCGTTCAGAAA
3156	TGCTAATAAGCACGCCTAGCCCGT	ACGGCTAGGCGTGCTTATTAGCA
3157	AAATTAATTGTGGTGGCTCCGGCG	CGCCGGAGCCACCACAATTAATTT
3158	TTACAATCCTCGGGCTCACTGACA	TGTCAGTGAGCCCGAGGATTGTAA
3159	GCTGAAGGACAAGGCGTGGGCAAC	GTTGCCCACGCCTTGTCCTTCAGC
3160	GGGATAGGAGACCCTCGCAATGGT	ACCATTGCGAGGGTCTCCTATCCC
3161	TTGCAGTACGTCCTTGCGCATGAA	TTCATGCGCAAGGACGTACTGCAA
3162	TTGATCACTGGATTGGGTGCGAAC	GTTCGCACCCAATCCAGTGATCAA
3163	TCTGCAGACGTTGCGAGAGATGAT	ATCATCTCTCGCAACGTCTGCAGA
3164	AGTCTAGCAGGGATCGAAGCGGAT	ATCCGCTTCGATCCCTGCTAGACT
3165	GGGGTCCCGCAACAACTAATGAAG	CTTCATTAGTTGTTGCGGGACCCC
3166	CAACCTCTTATGTGGTGTGCGCGA	TCGCGCACACCACATAAGAGGTTG
3167	CTCGCTGGGTTGCTGGAGTAGCAC	GTGCTACTCCAGCAACCCAGCGAG
3168	CGTTGTATTGTGCAACGCGAAGTT	AACTTCGCGTTGCACAATACAACG
3169	GGGCTCAAAGTGCCTGAGTCGAAA	TTTCGACTCAGGCACTTTGAGCCC
3170	CTGCTGTGCCCTCTCAGTGAGAGC	GCTCTCACTGAGAGGGCACAGCAG
3171	CGGACGTACTGTTCGGAGTCCTCA	TGAGGACTCCGAACAGTACGTCCG
3172	GTATACCACCATACCGGGACCGCA	TGCGGTCCCGGTATGGTGGTATAC

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## TABLE 3

Seq. ID No.	Decoder Sequence (5'-3')	Probe Sequence (5'-3')
17	TTCGCCGTCGTGTAGGCTTTTCAA	TTGAAAAGCCTACACGACGGCGAA
18	GTTCCCAGTGAAGCTGCGATCTGG	CCAGATCGCAGCTTCACTGGGAAC
19	TACTTGGCATGGAATCCCTTACGC	GCGTAAGGGATTCCATGCCAAGTA
20	ACTAGCATATTTCAGGGCACCGGC	GCCGGTGCCCTGAAATATGCTAGT
21_	GAACGGTCAATGAACCCGCTGTGA	TCACAGCGGGTTCATTGACCGTTC
22	GCGGCCTTGGTTCAATATGAATCG	CGATTCATATTGAACCAAGGCCGC
23	GATCGTTAGAGGGACCTTGCCCGA	TCGGGCAAGGTCCCTCTAACGATC
24	TGGACCTAGTCCGGCAGTGACGAA	TTCGTCACTGCCGGACTAGGTCCA
25	ATAAACTACCCAGGACGGGCGGAA	TTCCGCCCGTCCTGGGTAGTTTAT
26	CATCGGTTCGCGCCAATCCAGATA	TATCTGGATTGGCGCGAACCGATG
27	GTCGGGCATAGAGCCGACCACCCT	AGGGTGGTCGGCTCTATGCCCGAC
28	CTTGGGTCATGATTCACCGTGCTA	TAGCACGGTGAATCATGACCCAAG
29	TGCCTAACGTGCTAATCAGCAGCG	CGCTGCTGATTAGCACGTTAGGCA
30	CGCATGTTGGAGCATATGCCCTGA	TCAGGGCATATGCTCCAACATGCG
31	AGCCACTGCATCAGTGCTGTTCAA	TTGAACAGCACTGATGCAGTGGCT
32	GGTTGTTTTGAGGCGTCCCACACT	AGTGTGGGACGCCTCAAAACAACC
33	TCGACCAAGAGCAAGGGCGGACCA	TGGTCCGCCCTTGCTCTTGGTCGA
34	GACATCGCTATTGCGCATGGATCA	TGATCCATGCGCAATAGCGATGTC
35	GAAATACGAAGTCTGCGGGAGTCG	CGACTCCCGCAGACTTCGTATTTC
36	TGTCATGAATGATTGATCGCGCGA	TCGCGCGATCAATCATTCATGACA
37	ATATCGGGATTCGTTCCCGGTGAA	TTCACCGGGAACGAATCCCGATAT
38	GCGAGCGTACCGAAGGGCCTAGAA	TTCTAGGCCCTTCGGTACGCTCGC
39	TTACCGGCAGCGGACTTCCGAATT	AATTCGGAAGTCCGCTGCCGGTAA
40	GTAATCGAGAGCTGCGCGCCGTCT	AGACGGCGCGCAGCTCTCGATTAC
41	CCTGTTAGCGTAGGCGAGTCGATC	GATCGACTCGCCTACGCTAACAGG
42	TAGCGGACCGGCAGAATGAGTTCC	GGAACTCATTCTGCCGGTCCGCTA
43	GGTACATGCACTACGCGCACTCGG	CCGAGTGCGCGTAGTGCATGTACC
44	AATTCATCTCGGACTCCCGCGGTA	TACCGCGGGAGTCCGAGATGAATT
45	GCCAAATCTGGATTGGCAGGAATG	CATTCCTGCCAATCCAGATTTGGC
46	TGCATTTTCGGTTGAGGCACATCC	GGATGTGCCTCAACCGAAAATGCA
47	CCGCTCAATTCACCATGCTTCGCT	AGCGAAGCATGGTGAATTGAGCGG
48	CTCGGAAAGGTGCAACTTTGGTGT	ACACCAAAGTTGCACCTTTCCGAG
49	AATTCGACCAGCAGAACGTCCCAT	ATGGGACGTTCTGCTGGTCGAATT
50	GCCAGAGTCTCAACCTCACGGGAT	ATCCCGTGAGGTTGAGACTCTGGC
51	CCAACAACTGGAACGGGAACCCGC	GCGGGTTCCCGTTCCAGTTGTTGG
52	GAGAACTGATCGCTGAGGGGCATG	CATGCCCCTCAGCGATCAGTTCTC
53	GGCACACTAGACTTGTGGCACCGA	TCGGTGCCACAAGTCTAGTGTGCC

	54	TCACATCCAAATATGGTCCGCGAA	TTCGCGGACCATATTTGGATGTGA
	55	GTCTGCCGGTGTGACCGCTTCATT	AATGAAGCGGTCACACCGGCAGAC
	56	CATCGCAGAGCATAAACACCCTCA	TGAGGGTGTTTATGCTCTGCGATG
	57	GTTGGTATCTATGGCAGAGGCGGA	TCCGCCTCTGCCATAGATACCAAC
5	58	ACGAGGTGCCGCTGAGGTTCCATT	AATGGAACCTCAGCGGCACCTCGT
	59	GGAATGAGTGGACCCAGGCACATT	AATGTGCCTGGGTCCACTCATTCC
	60	TGTCAATATGCGTCCGTGTCGTCT	AGACGACACGGACGCATATTGACA
	61	TGATGAGCCTCAGGGTACGAGGCA	TGCCTCGTACCCTGAGGCTCATCA
	62	CACCGCGGTGTTCCTACAGAATGA	TCATTCTGTAGGAACACCGCGGTG
10	63	TTGTTGCCAATGGTGTCCGCTCGG	CCGAGCGGACACCATTGGCAACAA
	64	TTAACCTGCGTCTGCCCCTTTCCT	AGGAAAGGGGCAGACGCAGGTTAA
	65	AGGCGCGTTCCTGCCTTAGTGACG	CGTCACTAAGGCAGGAACGCGCCT
	66	TAGGGCGATGGCACGAAGCTTCAA	TTGAAGCTTCGTGCCATCGCCCTA
	67	TGCATAGAGCCAAAGTCGGCGATG	CATCGCCGACTTTGGCTCTATGCA
15	68	TTGAGAGGCAGGTGGCCACACGGA	TCCGTGTGGCCACCTGCCTCTCAA
	69	TCCGCATTGTGAGAAAAAACGAGC	GCTCGTTTTTTCTCACAATGCGGA
	70	GGCGGTTTCCGTAGCTATAGGTGC	GCACCTATAGCTACGGAAACCGCC
	71	GGTGAAAATTTCGTAGCCACGGGC	GCCCGTGGCTACGAAATTTTCACC
	72	CCGACGGAGGATGAAGACAATCAC	GTGATTGTCTTCATCCTCCGTCGG
20	73	CCAGTTTGGCCCAATTCGCCAAAA	TTTTGGCGAATTGGGCCAAACTGG
	74	GGATCTATTAGGCCGTGCGCACAG	CTGTGCGCACGGCCTAATAGATCC
ı	75	CGGATGTCACCGTTTGGACTTTCA	TGAAAGTCCAAACGGTGACATCCG
	76	ATCGCAAATCCTGCTCGTCCCTAA	TTAGGGACGAGCAGGATTTGCGAT
	77	CAGGGCATGCAATAATCGAGGTTC	GAACCTCGATTATTGCATGCCCTG
25	78	CATGCGTTGATATATGGGCCCAAG	CTTGGGCCCATATATCAACGCATG
	79	CAGCTGCAGCTTGTGACCAACCAC	GTGGTTGGTCACAAGCTGCAGCTG
	80	TTGTATGTCTGCCGACCGGCGACC	GGTCGCCGGTCGGCAGACATACAA
	81	GATGGCGCCCGTTGATAGGTATGG	CCATACCTATCAACGGGCGCCATC
	82	ATGAGAATCGCCGGCAATCTGCTA	TAGCAGATTGCCGGCGATTCTCAT
30	83	ATTTGCACTGACCGCAGGCTCGTG	CACGAGCCTGCGGTCAGTGCAAAT
	84	CAGGGAGAACGGTTAAGTTCCCGT	ACGGGAACTTAACCGTTCTCCCTG
	85	AGGCCGGCGATCGAGGAGTTTGGT	ACCAAACTCCTCGATCGCCGGCCT
	86	ACACGGTGGTCTCTGATAGCGACC	GGTCGCTATCAGAGACCACCGTGT
	87	GTGCAACGCCGAGGACTTCCATCA	TGATGGAAGTCCTCGGCGTTGCAC
35	88	TCGGTGCCTGATAGCCATTCCGAT	ATCGGAATGGCTATCAGGCACCGA
	. 89	TGAAATACCACACAGCCAATTGGC	GCCAATTGGCTGTGTGGTATTTCA
	90	GCATCGTGTACATGACTGCCGCGA	TCGCGGCAGTCATGTACACGATGC
	91	CAGTGTTCTAACGGCGCGCGTGAA	TTCACGCGCGCCGTTAGAACACTG
,	92	CGCTTGCAACGTTGCACCTACTCT	AGAGTAGGTGCAACGTTGCAAGCG
40	93	CGAAAAACTAGTGGGCTCGCCGCG	CGCGGCGAGCCCACTAGTTTTCG
Į	94	CTTTCAGGGGAACTGCCGGAGTCG	CGACTCCGGCAGTTCCCCTGAAAG

	95	TTGTGGCCTTCTTGTAAAGGCACG	CGTGCCTTTACAAGAAGGCCACAA
	96	TCCACGAACGGCGACCCGTTGTCT	AGACAACGGGTCGCCGTTCGTGGA
	97	CGACCTTGCACGAAACCTAACGAG	CTCGTTAGGTTTCGTGCAAGGTCG
	98	GTGCAGCTTCACGAGCCAGCCTGA	TCAGGCTGGCTCGTGAAGCTGCAC
5	99	CGCTTTCGTGCGAATAGACGATGA	TCATCGTCTATTCGCACGAAAGCG
	100	TGCGCTTACAGGCTCCTAGTGGTC	GACCACTAGGAGCCTGTAAGCGCA
	101	CACGCGCTTAGTCGCGATCGCATA	TATGCGATCGCGACTAAGCGCGTG
	102	CGGAGGGAGGGAGCTAGCCTTCGA	TCGAAGGCTAGCTCCCTCCG
	103	GCATCCGGCCTGTTGATGACGCCT	AGGCGTCATCAACAGGCCGGATGC
10	104	AGGCCAATCGATCTTATTGCCGAG	CTCGGCAATAAGATCGATTGGCCT
	105	CCTTCCAATGATTGCATACGCCCA	TGGGCGTATGCAATCATTGGAAGG
	106	AACACTTGATCAGGCGGGTCGTCT	AGACGACCCGCCTGATCAAGTGTT
	107	TGGAATCAAGGCCGTAAAGGACAG	CTGTCCTTTACGGCCTTGATTCCA
	108	GCTCCCGTAACCTGTCCACCAGTG	CACTGGTGGACAGGTTACGGGAGC
15	109	AGTGGTGAATGGCCGCTACCCTGA	TCAGGGTAGCGGCCATTCACCACT
	110	TGTTGAAGCGAGCTAAAACGGCCA	TGGCCGTTTTAGCTCGCTTCAACA
	111	CAGCGCTCCAGAATTGACAGCAAT	ATTGCTGTCAATTCTGGAGCGCTG
	2	TTCGAAGCGCACGTCCCTTTTCAA	TTGAAAAGGGACGTGCGCTTCGAA
	3	AACGCGTGGGGAATGGGACATCAA	TTGATGTCCCATTCCCCACGCGTT
20	114	CACGAGATACCGGCGTAAGGGTGG	CCACCCTTACGCCGGTATCTCGTG
	115	CTACGGCAAACGTGTGGAATGGGT	ACCCATTCCACACGTTTGCCGTAG
	116	GTAGGGCGATGACGGCGAACTAC	GTAGTTCGCCCGTCATCGCCCTAC
	117	AATCGACCTCCGCACACATTCGCA	TGCGAATGTGTGCGGAGGTCGATT
	118	GAGTCAGCATGGCGGCGGAGATTC	GAATCTCCGCCGCCATGCTGACTC
25	119	AGATAAAGACGCTGGCAACACGGG	CCCGTGTTGCCAGCGTCTTTATCT
	120	GGTACCTCAACGCGAACCACTTGT	ACAAGTGGTTCGCGTTGAGGTACC
	121	AAGCGATGGCTACCCAAGAGCGAT	ATCGCTCTTGGGTAGCÇATCGCTT
	122	AGAGCTTATGCAGAACCAGGCGCC	GGCGCCTGGTTCTGCATAAGCTCT
	123	ATCGGTCTCACGCAGGGTTGGATA	TATCCAACCCTGCGTGAGACCGAT
30	124	TAGGTTGCCCGCCAGAAGAACAT	ATGTTTCTTCTGGCGGCCAACCTA
	125	CGGTGCTGTTGCAAAAGCCTGTAG	CTACAGGCTTTTGCAACAGCACCG
	126	TGATGAAAGTTTGCGGCAGGACAC	GTGTCCTGCCGCAAACTTTCATCA
	127	GTTGAGTGCAGGATAG	CTATCGCTGCATCCTGCACTCAAC
	128	AACATTGCGCGGTCCACCAGGGTT	AACCCTGGTGGACCGCGCAATGTT
35	129	GGGCAGTTAGAGAGGGCCAGAAGT	ACTTCTGGCCCTCTCTAACTGCCC
	130	TCGAGCTGGTCCCCGTGAACGTGT	ACACGTTCACGGGGACCAGCTCGA
	131	GTCTTGGGGGCCGCTTAGTGAAAA	TTTTCACTAAGCGGCCCCCAAGAC
	132	ACTGTTGGCTTGCTCATGTCCA	TGGACATGAGAGCAAGCCAACAGT
	133	AGGACCATTCGGAAGGCGAAGATA	TATCTTCGCCTTCCGAATGGTCCT
40	134	CTTGGGAGGCATCCGCTATAAGGA	TCCTTATAGCGGATGCCTCCCAAG
	135	AATAAACGGAACGCACCGCTACAG	CTGTAGCGGTGCGTTCCGTTTATT

	136	TTGTACGTGCGGTCCCCATAAGCA	TGCTTATGGGGACCGCACGTACAA
	137	CGCACCAAACTGAGTTTCCCAGAC	GTCTGGGAAACTCAGTTTGGTGCG
	138	ACCTGATCGTTCCCCTATTGGGAA	TTCCCAATAGGGGAACGATCAGGT
	139	GGAACAGAGGCGAGGGGACTGAGC	GCTCAGTCCCCTCGCCTCTGTTCC
5	140	CCCTGCCTTGGCGTGTCGGCTTAT	ATAAGCCGACACGCCAAGGCAGGG
	141	ACTCTGACACGCCAACTCCGGAAG	CTTCCGGAGTTGGCGTGTCAGAGT
	142	CTGACGGTTTTCATTCGGCGTGCC	GGCACGCCGAATGAAAACCGTCAG
	143	TGCGGTGGTTCATTGGAGCTGGCC	GGCCAGCTCCAATGAACCACCGCA
	144	GCATGGCCAACTAGTGACTCGCAA	TTGCGAGTCACTAGTTGGCCATGC
10	145	AGGCCGTAAAGCGAATCTCACCTG	CAGGTGAGATTCGCTTTACGGCCT
	146	CGAATATTATGCCGAGAATCCGCG	CGCGGATTCTCGGCATAATATTCG
	147	ACAGACGAGCTCCCAACCACATGA	TCATGTGGTTGGGAGCTCGTCTGT
	148	GGACGGTTTGTGCTGGATTGTCTG	CAGACAATCCAGCACAAACCGTCC
	149	AAAGGCTATTGAGTTGGTTGGGCG	CGCCCAACCAACTCAATAGCCTTT
15	150	GATGGCCTATTCGGAGATCGGGCC	GGCCCGATCTCCGAATAGGCCATC
	151	GATCCAGTAGGCAGCTTCATCCCA	TGGGATGAAGCTGCCTACTGGATC
	152	AATAACTCGCGCGGGTATGCTTCT	AGAAGCATACCCGCGCGAGTTATT
	153	GGAGGAGGTTTGTCTCGGAAAGCA	TGCTTTCCGAGACAAACCTCCTCC
	154	CTTTGGTATGGCACATGCTGCCCG	CGGGCAGCATGTGCCATACCAAAG
20	155	AGAAAGGCTCGAGCAACGGGAACT	AGTTCCCGTTGCTCGAGCCTTTCT
	156	AATCTACCGCACTGGTCCGCAAGT	ACTTGCGGACCAGTGCGGTAGATT
	157	CGTGGCGGCCACAGTTTTTGGAGG	CCTCCAAAAACTGTGGCCGCCACG
	158	TTGCAGTTCAATCCATACGCACGT	ACGTGCGTATGGATTGAACTGCAA
	159	GGCCCAAAGCCCCAGACCATTTTA	TAAAATGGTCTGGGGCTTTGGGCC
25	160	CGCCTGTCTTTGTCTCCGGACAAT	ATTGTCCGGAGACAAGACAGGCG
	161	TGAGGCAACAGGGGCCAAAAACTA	TAGTTTTTGGCCCCTGTTGCCTCA
	162	AGCGGAAGTAGTCCTCGGCTCGTC	GACGAGCCGAGGACTACTTCCGCT
	163	GGCCCCAAGGCTTAGAGATAGTGG	CCACTATCTCTAAGCCTTGGGGCC
	164	GCACGTGAAGTTTAACCGCGATTC	GAATCGCGGTTAAACTTCACGTGC
30	165	AGCGGCAGAAACGTTCCTTGACGG	CCGTCAAGGAACGTTTCTGCCGCT
	166	TCGTCGAGCAGACGAGATTGCACG	CGTGCAATCTCGTCTGCTCGACGA
	167	TCTTTGCCGCGTAACTGACTGCTT	AAGCAGTCAGTTACGCGGCAAAGA
	168	TTTATGTGCCAAGGGGTTAACCGA	TCGGTTAACCCCTTGGCACATAAA
	169	TGTTACTGTGGTTCACGGCAGTCC	GGACTGCCGTGAACCACAGTAACA
35	170	CGCGCCTCGCTAGACCTTTTATTG	CAATAAAAGGTCTAGCGAGGCGCG
•	171	ACAAATGCGTGAGAGCTCCCAACT	AGTTGGGAGCTCTCACGCATTTGT
	172	CGCGCAGATTATAGACCCGAATGT	ACATTCGGGTCTATAATCTGCGCG
	173	CAAATAACGCCGCTGAATCGGCGT	ACGCCGATTCAGCGGCGTTATTTG
	174	CCTTCGTGCATCGGTGATGATGTT	AACATCATCACCGATGCACGAAGG
40	175	TGAACACGAGCAACACTCCAACGC	GCGTTGGAGTGTTGCTCGTGTTCA
	176	CAGCAGATCCTTCGTAGCGGTCGT	ACGACCGCTACGAAGGATCTGCTG

	177	GGAACCTGGTGAGTTGTGCCTCAT	ATGAGGCACAACTCACCAGGTTCC
	178	TCATAAGCGACAATCGCGGGCTTA	TAAGCCCGCGATTGTCGCTTATGA
	179	CCCAACGTCACTGAAGCTCACAGT	ACTGTGAGCTTCAGTGACGTTGGG
	180	TGTCAGAGCCCGCGACTCAGACGG	CCGTCTGAGTCGCGGGCTCTGACA
5	181	TACACGAAGCCTCTCCGTGGTCCA	TGGACCACGGAGAGGCTTCGTGTA
	182	CTCAGAAGTCCTCGGCGAACTGGG	CCCAGTTCGCCGAGGACTTCTGAG
	183	ATCCTTTTATCTACTCCGCGGCGA	TCGCCGCGGAGTAGATAAAAGGAT
	184	AGGCGTGCAGCAACAGGATAAACC	GGTTTATCCTGTTGCTGCACGCCT
	185	ACTCTCGAGGGAGTCTCTGGCACA	TGTGCCAGAGACTCCCTCGAGAGT
10	186	TTGCCAGGTCCATCGAGACCTGTT	AACAGGTCTCGATGGACCTGGCAA
	187	TCCACTATAACTGCGGGTCCGTGT	ACACGGACCCGCAGTTATAGTGGA
	188	GCCCAGTCGGCTCTAACAAGTTCG	CGAACTTGTTAGAGCCGACTGGGC
	189	CGGAACGGATAATCGGCGTCAGGT	ACCTGACGCCGATTATCCGTTCCG
	190	TAAAATAAGCGCCTGGCGGGAGGA	TCCTCCGCCAGGCGCTTATTTTA
15	191	GCGCACTCGTGAAACCTTTCTCGC	GCGAGAAAGGTTTCACGAGTGCGC
	192	AGTTTGCCAGGTACTGGCAAGTGC	GCACTTGCCAGTACCTGGCAAACT
	193	ACAACGAGGGATGTCCAGCGGCAT	ATGCCGCTGGACATCCCTCGTTGT
	194	TTCGCAGCACCCGCTAGGTACAGT	ACTGTACCTAGCGGGTGCTGCGAA
	195	TAACCCGATTTTTGCGACTCTGCC	GGCAGAGTCGCAAAAATCGGGTTA
20	196	CGTCGCATTGCAAGCGTAGGCTTG	CAAGCCTACGCTTGCAATGCGACG
	197	GAGCTGACGTCACCATCAGAGGAA	TTCCTCTGATGGTGACGTCAGCTC
	198	GGAGGCTGGGGGTCGCGCTTAAGT	ACTTAAGCGCGACCCCCAGCCTCC
	199	TTGTGGGAACCGCACTAGCTGGCT	AGCCAGCTAGTGCGGTTCCCACAA
	200	CCCTCGCACTGTGTTCACCCTCTT	AAGAGGGTGAACACAGTGCGAGGG
25	201	TCATTGACTCGAATCCGCACAACG	CGTTGTGCGGATTCGAGTCAATGA
	202	ACAGGGTTGGCCTTCGTACGTAC	GTACGTACGAAGGCCAACCCCTGT
	203	AGGCCGTGCAACATCACACAGGAT	ATCCTGTGTGATGTTGCACGGCCT
	204	GGGCCGTGGTCACGTAATATTGGC	GCCAATATTACGTGACCACGGCCC
	205	GCGCGGACATGAAACGACAAGGCC	GGCCTTGTCGTTTCATGTCCGCGC
30	206	CTTATTGGGTGCCGGTGTCGGATT	AATCCGACACCGGCACCCAATAAG
	207	GGGGCGGTTACCAAAAAATCCGAT	ATCGGATTTTTTGGTAACCGCCCC
	4	CCGTCGCATACCGGCTACGATCAA	TTGATCGTAGCCGGTATGCGACGG
	5	ATGGCCGTGCTGGGGACAAGTCAA	TTGACTTGTCCCCAGCACGGCCAT
	210	ACGAAAAAGTGTGCGGATCCCCT	AGGGGATCCGCACACTTTTTCGT
35	211	CCAAGTACACCGCACGCATGTTTA	TAAACATGCGTGCGGTGTACTTGG
. [	212	ATCGTGCGTGGAGTGTCGCATCTA	TAGATGCGACACTCCACGCACGAT
	213	TCCAGATACCGCCCCGAACTTTGA	TCAAAGTTCGGGGCGGTATCTGGA
	214	TCTGCTGGCAGCACGTGAAGTGGC	GCCACTTCACGTGCTGCCAGCAGA
ļ	215	TTGAAATTGCTCTGCCGTCAGTCA	TGACTGACGGCAGAGCAATTTCAA
40	216	AGTCAGGCGAGATGTTCAGGCAGC	GCTGCCTGAACATCTCGCCTGACT
Ĺ	217	ACAAGCCGACGTTAAGCCCGCCCA	TGGGCGGCTTAACGTCGGCTTGT

219 GTGAGACACATCCCCTCCAATG 220 CGAGGGATGCAGAGTTCAGTGGTC 221 CCCGCATGCAGGTTCAGTGGTC 221 CCCGCATGCCTGGCGGTATTACAA TITGTAATACCGCCAGGCAGTGCGG 5 222 TTAGCAAAGCGGCGCGTTTAGCAA TTGTAATACCGCCAGGCATGCGG 5 222 TTAGCAAAGCGGCGCGTTTAGCAA TTGCTAACGGCCGGCTTTGCTA 223 CCCGACACGGGTCAGCGTATAAT ATTATTACGCTGACCCGTTGCGC 224 GCGACGGCCCTGAGGTATAAT ATTATTACGCTGACCCGTTGCGC 225 CAAAAGTTGTTCCCTTGCGCTTG 226 CTACAAGTTGTTCCTTGCGCTTG 227 ATGCTAACCGTTGGCCATTGCACT 228 CTTGCGAACACAGCCCGGTTATTG 228 CTTGCGAACCACACCCGGTTATTG 229 TGCTCCCTAGGGCCTGGAGACT 229 TGCTCCCTAGGGCCTTGGAACT 229 TGCTCCCTAGGGCCTCGGAGAGAT 229 TGCTCCCTAGGCGCTCGGAGAGAT 229 TGCTCCCTAGGCGCTCGGAGAGAT 229 TGCTCCCTAGGCGCTCGGAGAGAT 230 CCAATGCCTTTGAGTAAGCGATGG 231 AGCAGATTACGTGCCCAATGACGCC 232 TTGACCATTACGTGTTGCCCCAAT 233 TCGCGTATTTGCGCAATTACGCGCAATTCGCGCAATACGCAACCCTATTGCGCAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGAAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGCAATTCGCGAAACCCAACCGTAATTGCCAACCAA				
220		218	CCCTAATGAGGCCAGTAACCTGCA	TGCAGGTTACTGGCCTCATTAGGG
221 CCCGCATGCCTGGCGGTATTACAA TITGTAATACCGCCAGGCATGCGG 222 TTAGCAAAGCGGCGCCGTTTGCTAA 223 CCCGACAGCGGCGCGTTAGCAA TITGCTAACGGCGCGCTTTGCTAA 224 GCGACGGCCCTGAGGTATGCTC GACGACATACCTCAGGCCCGTCTCGCCCGCTCGCGCCCCTCGCGCTCGCCCCCC		219	GTGAGACACACATCCCCTCCAATG	CATTGGAGGGGATGTGTGTCTCAC
5 222 TTAGCAAAGCGGCGCGTTAGCAA TTGCTAACGGCGCCGCTTTGCTAA 223 CCCGACACGGGTCAGCGTAATAAT ATTATTACGCTGACCCGTGTCGGC 224 GCCACGGCCCTGAGGTATGCTC CACGACACGACCCGTGTCGGC 225 CAAAAGTGTTCCCTTGCGCTTG CACGACGCAAGGGAACACACTCGCGCTGC 226 TCTCGAAGCACAGCCCGGTTATTG CAATAACCGGGCTGTGCTTCGAG 228 CTTGCGAAGCACAGCCCGGTTATTG CAATAACCGGGCTGTGCTTCGAG 228 CTTGCGGAGTGTTAGCCCAGCGGT ACCGCTACACGCTTAGCAC 229 TGCTCCCTAGGCGCTCGGAACT AGTTCCATGGCCAACGGTTAGCA 229 TGCTCCCTAGGCGCTCGGAACGT ACCGCTGGCCTAACACTCCGCAA 229 TGCTCCCTTAGGCACTCGGAACT ACCGCTTGCTACAAGCGATGC 230 CCAATGCCTTTGAGTAACCGATGG CCATCGCTTACTCAAAGCGATTCGC 231 AGCAGATAACGTCCCAATGACGCC GGCGTCATTGGGACGCTTAGCAACGTTATCTGC 232 TTGACCATTACGTGTTGCGCCAT ATGGGCGCAACACGTAATACGCG/ 233 TCGCGTATTTGCGAACATGTCCCCAA TGGGCGCCAACACGTAATACGCG/ 234 CTCGGGGAACTACTTAATTGCGG CTGCGGAACACGTAATACGCG/ 235 CTCCGGGAGGTCACTTAATTGCGG CTGCGGAACTTAACTCCGCAA 236 CTCCGGGAGGTCACTTAATTGCGG CCGCAATTAACTGCGCAACACGTAATACGCG/ 237 TTTTCGTGATTGCCCGGAGGAGGC CCGCGAATTAACTCCGGAAC 238 TCGGGATTGCCCCAGAGGTCCACAG CTGTGGACCCTAGCACCAGCACACGTACATCCCGC 239 CGACCAACGCAACGGTCCCACG CCGGTAGCCCCAACGACACACCACCACACCA		220	CGACGGATGCAGAGTTCAGTGGTC	GACCACTGAACTCTGCATCCGTCG
223 CCCGACAGGGTCAGCGTAATAAT  224 GCGACGGCCTGAGGTATGTCGTC  225 CAAAAGTGTGTTCCCTTGCGCTTG  226 TCTCGAAGCACCAGCCCGGTTATTG  227 ATGCTAACCGTTGGCCATGGAACT  228 CTTGCGAAGCACCAGCCCGGTTATTG  228 CTTGCGAGCTTGGCCATGGAACT  229 TGCTCCCTAGGCGCTCGAGGACT  229 TGCTCCCTAGGCGCTCGAGGACT  229 TGCTCCCTAGGCGCTCGAGGACT  230 CCAATGCCTTTGAGTAAGCGC  231 AGCAGATAACGTCCCAATGACGC  231 AGCAGATAACGTCCCAATGACGC  232 TGCTCCTAGGCGCTCGAGGAGT  232 TGCCCTTTGAGTAAGCGC  233 TGGCGTATTTGCGCCCAT  234 CTGCGTTACTCAAAGCGATTGC  235 TCTGGTGCAACAATTCTTCTG  236 CTCCGGGAGGTCACAATTCGTCTG  237 TTTTCGTGATTTGCCCCAAC  238 CTCCGGGAGGTCACTAGTTTTTTCCGCCAATTACGCAACCAATACGCCAACCAA		221	CCCGCATGCCTGGCGGTATTACAA	TTGTAATACCGCCAGGCATGCGGG
224 GCGACGGCCTGAGGTATGTCGTC  225 CAAAAGTGTGTTCCCTTGCGCTTG  226 TCTCGAAGCACACCCGGTTATTG  227 ATGCTAACCGTTGGCACTTG  227 ATGCTAACCGTTGGCCATGGAACT  228 TCTCGGAGGATGTTAGCCCAGCGGT  229 TGCTCCCTAGGGGCTCGGAACT  229 TGCTCCCTAGGGGCTCGGAGGACT  229 TGCTCCCTAGGGGCTCGGAGGACT  230 CCAATGCCTTTGAGTAGCGCT  231 AGCAGATAACGTCCCAATGAGCGT  232 TTGACCATTACGTTTGCGCCAT  233 TCGCGTTTTGAGTAGCGCCAT  234 CTGCGGTATTTGCGCAATGAGCC  235 TCTGGTTTTGAGTATAGCCCAGCGCAT  236 CTCGCGGATTTTTGCCCAGCCCAT  237 TTTTGACCATTACGTTTTGCGCCAT  238 CTCGGGAGGAGCTCGGCAT  238 CTCCGGGAGGTCACATGACGCC  238 CTCCGGGAGGTCACATGACGC  239 TTTTTGGATTTGCCCGAGCGCACT  240 GCAAAGCCTTTATTTGCGCCCGCAT  241 ATTCGACTGAGCGCACTACACGCCCGCACACGCCACACGTATGGTCACCGCACCCCACACGCCAACGCCACACGCCACACGCCACACCCCACACCCCACACCCCCACACCCCCACACCCCC	5	222	TTAGCAAAGCGGCGCCGTTAGCAA	TTGCTAACGGCGCCGCTTTGCTAA
225 CAAAAGTGTGTTCCCTTGCGTTIG CAAGCGCAAGGGAACACCTTTTC 226 TCTCGAAGCACAGCCCGGTTATTG CAATAACCGGGCTGCTTCGAG 227 ATGCTTACCGTTGGCCATGGAACT AGTTCCATGGCCAACGGTTAGCAT 228 CTTGCGGAGTGTTAGCCCAGCGGT ACCGCTGGGCTAACACTCCGCAAC 229 TGCTCCCTAGGCGCTCGGAGGAGT ACTCCTCCGAGCGCCTAGGAGCAC 230 CCAATGCCTTTGAGTAAGCGATG CCATCGCTAACACTCCGCAAC 231 AGCAGATAACGTCCCAATGACGCC GGCGTCATTGGGACGTTATCTGC 233 TGGCGTATTTGCGGAATTCGTCTG CAGACGATTACTGCAAGAGCATTAGCGCAC 234 CTGCGTGTTACGGGAATTCGTCTG CAGACGAATTCGCCAAATACGCGAC 235 TCGGGTATTTGCGGAATTCGTCTG CAGACGAATTCGCCAAATACGCGAC 236 CTCCGGGAAGTCACCAACGTCCCAACGCCACCACCACCACCACCACCACCACCACCACCA		223	CCCGACACGGGTCAGCGTAATAAT	ATTATTACGCTGACCCGTGTCGGG
226 TCTCGAAGCACAGCCCGGTTATTG CAATAACCGGGCTGTGCTTCGAGG 227 ATGCTAACCGTTGGCCATGGAACT AGTTCCATGGCCAACGGTTAGCAT 228 CTTGCGGAGTGTTAGCCCAGCGGT ACCGCTGGGCTAACACTCCGCAA 229 TGCTCCCTAGGCGCTCGGAGGAGT ACCGCTGGGCTAACACTCCGCAAC 230 CCAATGCCTTTGAGTAAGCGATGG CCATCGCTACACTCCGCAAC 231 AGCAGATAACGTCCCAATGACGC GCGCTCATTGGGAGCGTTATCTGCC 232 TTGACCATTACGTGTTTGCGCCCAT 233 TCGCGTATTTGCGGAATTCGTCG CAGCACACGCTAATGGGCACTTATTGGGC 234 CTGCGTGTAACAATGTCCCGCAG 235 TCTGGTGCAACAATGTCCCGCAG 236 CTCCGGGAGGTCCAACA 237 TTTTCGTGAACAATGTCCCGCAG 237 TTTTCGTGATTGCCGCAGG CTGCGGGACATTCATGCTCCGCACAC 238 TCGGGATGATTACTGCG CCGCAATTAAGTGCCTCCCGGAC 239 CGAGCCAACGCTAATTGCGG CCGCAATTAAGTGCCTCCCGAAC 239 CGAGCCAACGCAACACGTCCTTG CAAGGACGATTGCTTGCGTCACAACACACACACACACACA		224	GCGACGCCCTGAGGTATGTCGTC	GACGACATACCTCAGGGCCGTCGC
227 ATGCTAACCGTTGGCCATGGAACT 228 CTTGCGGAGTGTTAGCCCAGCGGT 228 CTTGCGGAGTGTTAGCCCAGCGGT 229 TGCTCCCTAGGCGCTCGGAGGAGT 229 TGCTCCCTAGGCGCTCGGAGGAGT 230 CCAATGCCTTTGAGTAAGGGATGG 231 AGCAGATAACGTCCCAATGACGCC 231 AGCAGATAACGTCCCAATGACGCC 231 AGCAGATAACGTCCCAATGACGCC 232 TTGACCATTACGTGTTGCGCCCAT 233 TCGCGTATTTGCGGAATTCGTCTG 233 TCGCGTATTTGCGGAATTCGTCTG 234 CTGCGTGTCAACAATGTCCCCAGG 235 TCTGGTCCACGAACAACATGTCCCCAGG 236 CTCCGGGAGGTCACACAG CTGCGGGACCATTGTCACACGCAC 237 TTTTCCTGATTGCCCGAGG CTGCGGGACCATTGCTCCCGGAC 238 TCGGGATGTAGCTGGGGCGACCAGG CCGCAATTAAGTGACCTCCCGGAC 239 CGAGCCAACGCAACGTCCTTG 240 GCAAAGCCTTTGTGGGGCGAACAGGTCTACCACAC 241 ATTCGACCGAAACACGTCCTTG CAAGGACCTCATTCCCGGAC 242 TCGCTTGCTGGAGCCACAGGTCTACGACACACACACACAC		225	CAAAAGTGTGTTCCCTTGCGCTTG	CAAGCGCAAGGGAACACACTTTTG
228 CTTGCGGAGTGTTAGCCCAGCGGT ACCGCTGGGCTAACACTCCGCAAC 229 TGCTCCCTAGGCGCTCGGAGGAGT ACTCCTCCGAGCGCCTAGGGAGC 230 CCAATGCCTTTGAGTAAGCGATGG CCATCGCTTACTCAAAGGCATTGC 231 AGCAGATAACGTCCCAATGACGC GGCGTCATTGGGACGTTATCTGC 231 TGACCATTACGTGTTGCGCCCAT ATGGGCGCAACACGTAATGGTCA 232 TTGACCATTGCGGATTCGTCT CAGACGAATTCCGCAAATACGCGC 233 TCGCGTATTTGCGGAATTCGTCT CAGACGAATTCCGCAAATACGCGA 235 TCTGGTGCAACAAGTTCCCCAACG CTGCGGGACATTGTTGACACACCAAC 235 TCTGGTGCCACGCAAGGTCCACAG CTGTGGACACTTTGATTGCGCGAATCACGCAAC 236 CTCCCGGGAGGTCACACG CTGCGGGACATTGATGACCCACAC 237 TTTTCGTGATTGCCCGGAGGAGGC CCCCCTCCCGGGCAATCACACACACACACACACACACACA		226	TCTCGAAGCACAGCCCGGTTATTG	CAATAACCGGGCTGTGCTTCGAGA
229 TGCTCCCTAGGCGCTCGGAGGAGT ACTCCTCCGAGCGCCTAGGGAGC 230 CCAATGCCTTTGAGTAAGCGATGG CCATCGCTTACTCAAAGGCATTGC 231 AGCAGATAACGTCCCAATGACGCC GGCGTCATTGGGACGTTACTGC 232 TTGACCATTACGTGTTGCGCCCAT ATGGCGCGAACACGTAATGGTCA 233 TCGCGTATTTGCGAAATTCGTCTG CAGACGAATTCCGCAAATACGCGA 234 CTGCGTGTCAACAATGCCCGCAG CTGCGGGACATTGTTGACCGCAA 235 CTCGGGGAGGTCACACAG CTGTGGGACATTGTTGACACGCAA 236 CTCCGGGAGGTCACCAG CTGTGGACATTGTTGACACGCAA 237 TTTTCGTGATTGCCCGGAGGAGGG CCCCCCTCCGGGCAATTAAGTGACCTCCCGGA 238 TCGGGATGTAGCTGGGGCTACCGG CCGCAATTAAGTGACCTCCCGGAC 239 CGAGCCAACGCAAACACGTCCTTG CAAGGACCTCCCGGACACACGCAACACGCCAACACGCCAACACGCCAACACGCCAACACGCCAACACGCCAACACGCCAACACGCCCCCACAAAGGCTTTGC 240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACCGCCCCACAAAGGCTTTGC 241 ATTCGACCGGAAATGAGGTCTTCG CGAAGACCCTATTTCCGGTCGAAT 242 TCGCTTGCTGAGATTGCTCTGTTC CAACAGACACCAACCAACCACCACACACACACACACAC	10	227	ATGCTAACCGTTGGCCATGGAACT	AGTTCCATGGCCAACGGTTAGCAT
230 CCAATGCCTTTGAGTAAGCGATGG CCATCGCTTACTCAAAGGCATTGG 231 AGCAGATAACGTCCCAATGACGC GGCGTCATTGGGACGTTATCTGC 232 TTGACCATTACGTGTTGCGCCCAT ATGGGCCAACACGTAATGGTCA 233 TCGCGTATTTGCGGAATTCGTCTG CAGACGAACACGTAATGGTCAA 234 CTGCGTGTCAACAATGTCCCGCAG CTGCGGGACATTGTTGACACGCAC 235 TCTGGTGCCACGCAAGGTCCACAG CTGTGGGACCTTGCGTGGACCAG 236 CTCCGGGAGGTCACTTAATTGCGG CCGCAATTAAGTGACCTCCCGGAC 237 TTTTCGTGATTGCCCGGAGGAGGGC CCGCAATTAAGTGACCTCCCGGAC 238 TCGGGATGACCCCGGAGGAGGC CCGCCAATCACGGAACACGCATCACGAACACGCACCGCACCACCGCAATCACGAACACGCCCCACCAACACGCAACACGCCCCACCAACACGCATCACCACCC 239 CCGAGCCAACGCAACACACGTCCTTG CAAGGACGTTTTGCGTTGGACCCC 239 CCGAGCCAACGCAACACGTCCTTG CAAGGACGTTTTCCCGAATCACCACCC 240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACCGCCCCACAAAGGCTTTGC 241 ATTCGACCGGAAATGAGGTCTTCG CGAAGACCTCATTTCCGGTCGAAT 242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAGCGAA 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATCAGGCAACCGTACATCCCGAACACGCCCACAAAGAGCAACCGCCAACAGGGAACTCAGCAAGCGAACCGTTTCCGAGT ACTCGGGAATCAGGAACCGCAACACGGTTTCCGAGT ACTCGGGAATCAGCAACCGGT 244 AACCGTATTCGCGGTCACTTGTGG CCACAAGTGACCGCGAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCCACAAGGGAACCCCAACCGGTTCCAAACGGTTC AAGCCGTTTGAACCGCACCGAACTACGGTTCCGCCAAACACGTTTCAACCACCCCGAACTACACAACCGCTTCAAACACACCCCCAACACGAACACACGCTTCAAACACACCCCCAACACGAACTACAACACACCCCCAACACACAC		228	CTTGCGGAGTGTTAGCCCAGCGGT	ACCGCTGGGCTAACACTCCGCAAG
231 AGCAGATAACGTCCCAATGACGCC GGCGTCATTGGGACGTTATCTGC 232 TTGACCATTACGTGTTGCGCCCAT ATGGGCACACACGTAATGGTCAA 233 TCGCGTATTTGCGGAATTCGTCTG CAGACGAACACGTAATGGTCAA 234 CTGCGTGTCAACAATGTCCCGCAG CTGCGGGACATTGTTGACACGCAC 235 TCTGGTGCCACGCAAGGTCCACAG CTGCGGGACATTGTTGACACGCAC 236 CTCCGGGAGGTCACTTAATTGCGG CCGCAATTAAGTGACCTCCGGAC 237 TTTTCGTGATTGCCCGGAGGAGAGGC CCCGCTATAAGTGACCTCCCGGAC 238 CCGGGATGTAACCGGCCCCAGCCCAACACACACCGCCCAGCAACACACACCGCCCAGCTACATCCCG 239 CGAGCCAACGCAACACACGTCCTTG CAAGGACGTGTTTGCGTGGACT 240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACCCCCCACCAAAAGCGTTTGC 241 ATTCGACCGGAAATGAGGTCTTCC GCAAGAACCTCATTTCCGGTCGAAT 242 TTCGCTTGCTGAGTTGCTCTGTC GAACAGACCTCATTTCCGGTCGAAT 243 CGCGTGAAGACCCCATTCCCGAGT ACTCCGGGAATCAGCAACGGAC 244 AACCGTATTCGCGGTCACTTTTCCGAGCAACACGGTCTTCACGCC 245 GGGGCCAACCGTTTCCAGGCGTAT ACTCCGGAATACGGTT 246 TTCGGCTGGCAGTCCAAACGGCTT AACCCCTCGAAACGGTTGGCCCC 247 GGGTGTGGTTAGAATGCACGGTT 248 GCGAGGACCGAACTAGACAAACCG CCGTTTGTAACCACCCCGAACGGACCGAACTAGCAACCGCTCCGAACACGGTTCTAACCACCCCCGAACACGGTTAAAAAGGTCGCTTGAAACGGTTCCGCCGAACTTCTAACCACCCCCCCC		229	TGCTCCCTAGGCGCTCGGAGGAGT	ACTCCTCCGAGCGCCTAGGGAGCA
TIGACCATTACGTGTTGCGCCCAT ATGGGCGCAACACGTAATGGTCAA  233 TCGCGTATTTGCGGAATTCGTCTG CAGACGAATTCCGCAAATACGCGA  234 CTGCGTGTCAACAATGTCCCGCAG CTGCGGGACATTGTTGACACGCAA  235 TCTGGTGCCACGCAAGGTCCACAG CTGTGGACCTTGCGTGGCACCAG  236 CTCCGGGAGGTCACTTAATTGCGG CCGCAATTAAGTGACCTCCCGGAC  237 TTTTCGTGATTGCCCGGAGGAGGC GCCTCCTCCGGGCAATCACGAAA  238 TCGGGATGTAGCTGGGGCTACCGG CCGGTAGCCCCAGCTACATCCCG  239 CGAGCCAACGCAAACACGTCCTTG CAAGGACGTGTTTGCGTTGGCTCC  240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACCGCCCCACAAAGGCTTTGC  241 ATTCGACCGGAAATGAGGTCTTCG CAAGGACCTCATTTCCGGTCGAAT  242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGACCACCTCAGACGCAAA  243 CGCGTGAAGACCCCATTCCCGAGT ACTCCGGGAATCAGGAAGCGAA  244 AACCGTATTCGCGGTCACTTTGTG  245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC  246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTGGCAACGGTTGGCCCCACAAAGGGTTTGAATGCACCGGTT  247 GGGTGTGTTAGAATGCACGGTT AAGCCCTTGAAACGGTTGGCCCCACAACGGTTGGCCCCACAAAGGGTTTGAACGCACCGAACGGTTAGAACACACCCG  248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTAGTTCGGTCCTCGCC  249 ACGCACGCGTGACCGAAGTTGCTG CAACCACTTCGGTCACCGCCGAA  35 GGAGGACCGAACTAGACAAACGG CCGTTTGTAACCACACCC  250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTAA  251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTGCCAGCCGACCCCAACGGTTTCAACCACCCC  252 GGAGGTATAAGCGGACCGACTCA TGAGGCCGCTCCACTTTAACCCACCCC  253 ATGCTGACATGTCGTGCACCTCGT ACGAGCGTCCCCTTTAACCCACCCC  254 TGTGGTTAAAGCGGACCGCTCA TGAGGCCGCTCCGCTTTATACCCACCC  255 CGTTCACACCGGCGTAACCTCGT ACGAGGTGCACGACTTTAACCACAC  255 CGTTCACACCGGCGTAAGCTCCGT ACGAGAGTTCCGCCGGGTGGACCACTCGCTTTAACCCACCC		230	CCAATGCCTTTGAGTAAGCGATGG	CCATCGCTTACTCAAAGGCATTGG
233 TCGCGTATTTGCGGAATTCGTCTG CAGACGAATTCCGCAATACGCGA 234 CTGCGTGCAACAATGTCCCGCAG CTGCGGGACATTGTTGACACGCAA 235 TCTGGTGCACGCAAGGTCCACAG CTGTGGACCTTGCGTGGCACCAG 236 CTCCGGGAGGTCACTTAATTGCGG CCGCAATTAAGTGACCTCCCGGAC 237 TTTTCGTGATTGCCCGGAGGAGGC GCCTCCTCCGGGCAATCACGAAA 238 TCGGGATGTAGCTGGGGCTACCGG CCGGTAGCCCCAGCTACATCCCG 239 CGAGCCAACGCAAACACGTCCTTG CAAGGACGTGTTTGCGTTGGCTCC 240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACGCCCCAACAAGGCTTTGC 241 ATTCGACCGGAAATGAGGTCTTCG CAAGGACCTCATTTCCGGTCGAAT 242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAAC 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGGGGTCTTCACGCC 244 ACCCGTATTCGCGGTCACTTTTCTGG 245 GGGGCCAACCGTTTCCAGGT ACTCGGGAATGGGGTCTTCACGCC 246 TTCGGCTGGCGTCAATCGGGTAT ATACGCCTCGAAACGGTTGGCCCC 247 GGGTGTGGTTAGAATGCACGGTT AAGCCCTCGAAACGGTTGGCCCC 248 GCGACGACCCATCCAAACGGCTT AAGCCCTTGAACCGCCGAACGGCCGAA 249 ACGCACGCGTTAGAAACGG CCGTTTGTACTCACCACCC 249 ACGCACGCGTAACACACACGG CCGTTTGTAACCACACCC 249 ACGCACGCGTGACCGAAACTGCGCGAAATGGGTCCTCGCC 250 TAAAAGGTCGCTTTGAAAGGGGAA 35 252 GGAGGTATAAGCGACACAACTG CAGCAACTTCCAACCGCTCCACCGACCGAACGGTTAACCACCCC 253 ATGCTGACATGCTGGGACCAA 35 252 GGAGGTATAAGCGACCCTCGT ACGACCGTCCGCTTATACCCAC 255 CGTTCACACCGGCGTAACCTCGT ACGACGTCACCGCTTTAACCACACCC 255 CGTCACACCGGCGTAACCTCGT ACGACACTTCCGCCGCTTTAACCACACCC 255 CGTTCACACCGGCGTAACCTCGT ACGACAGTTACCCCCGCGTGGACCACCCCCCCCCC		231	AGCAGATAACGTCCCAATGACGCC	GGCGTCATTGGGACGTTATCTGCT
234 CTGCGTGTCAACAATGTCCCGCAG CTGCGGGACATTGTTGACACGCAA 235 TCTGGTGCCACGCAAGGTCCACAG CTGTGGACCTTGCGTGGACCAG 236 CTCCGGGAGGTCACTTAATTGCGG CCGCAATTAAGTGACCTCCCGGAA 237 TTTTCGTGATTGCCCGGAGGAGGC CCGCCACTACATCCCGG 238 TCGGGATGTAGCTGGGGCTACCGG CCGGTAGCCCCAGCTACATCCCG 239 CGAGCCAACGCAAACACGTCCTTG CAAGGACGTTTTGCGTTGGCTCC 240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACCGCCCCACAAAGGCTTTGC 241 ATTCGACCGGAAATGAGGTCTTCG CGAAGACCTCATTTCCGGTCGAAT 252 242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAGCGAA 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGGGGTCTTCACGCC 244 AACCGTATTCGCGGTCACTTTGTGG CCACAAGTGACCGCAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGGACTGCCCGCAA 247 GGGTGTGGTAGAATGCACGGTTC GAACCGTTTGACCACCCGCCGAA 30 247 GGGTGTGGTTAGAATGCACGGTTC GAACCGTTCTAACCACACCCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGCTCCGCCGAACCGTTTGAAAGGGTGCGCTCACAACGGTTTCACGCCCGAACTACTGCTCGCCGAACTAGACAAACGG CCGTTTGTCTAACCACACCCC 249 ACGCACGCGTGACCGAACTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCCACCCCACC	15	232	TTGACCATTACGTGTTGCGCCCAT	ATGGGCGCAACACGTAATGGTCAA
235 TCTGGTGCCACGCAAGGTCCACAG CTGTGGACCTTGCGTGGCACCAG 236 CTCCGGGAGGTCACTTAATTGCGG CCGCAATTAAGTGACCTCCCGGAA 237 TTTTCGTGATTGCCCGGAGGAGGC GCCTCCTCCGGGCAATCACGAAA 238 TCGGGATGTAGCTGGGGCTACCGG CCGGTAGCCCCAGCTACATCCCG 239 CGAGCCAACGCAAACACGTCCTTG CAAGGACGTGTTTGCGTTGGCTCC 240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACCGCCCCACAAAGGCTTTGC 241 ATTCGACCGGAAATGAGGTCTTCG CGAAGACCTCATTTCCGGTCGAAT 251 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGAGGTCTTCACGCC 242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAGCGAA 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGAGGTCTTCACGCC 244 AACCGTATTCGCGGTCACTTGTGG CCACAAGTGACCGCGAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGGACTGCCAGCCGAA 247 GGGTGTGGTTAGAATGCACGGTT GAACCGTTTCTAACCACACCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAACCACACCCC 249 ACGCACGCTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGCAT 252 GGAGGTATAAGCGGAGCGCCTCA TGAGGCCGCTCCGCT		233	TCGCGTATTTGCGGAATTCGTCTG	CAGACGAATTCCGCAAATACGCGA
236 CTCCGGGAGGTCACTTAATTGCGG CCGCAATTAAGTGACCTCCCGGAC 237 TTTTCGTGATTGCCCGGAGGAGGC GCCTCCTCCGGGCAATCACGAAA 238 TCGGGATGTAGCTGGGGCTACCGG CCGGTAGCCCCAGCTACATCCCG, 239 CGAGCCAACGCAAACACGTCCTTG CAAGGACGTGTTTGCGTTGGCTCC 240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACCGCCCCACAAAGGCTTTGC 241 ATTCGACCGGAAATGAGGTCTTCG CGAAGACCTCATTTCCGGTCGAAT 242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAGCGAA 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGAGGGTCTTCACGCC 244 AACCGTATTCGCGGTCACTTGTGG CCACAAATGAGGTTTCACGCC 245 GGGGCCAACCGTTTCGAGGCGTAT ACCGCCTCGAAACGGTT 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGGACCGCGAA 30 247 GGGTGTGGTTAGAATGCACGGTT AAGCCGTTTCAACCACCCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGTTCGGTCCTCGC 249 ACGCACGCTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGCGAA 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACCAA 35 252 GGAGGTATAAGCGAGCGCCTCA TGAGGCCGCTCCGCTTTTAACCTCCACCCC 253 ATGCTGACATGTCGTGCACCTCGT ACGAGGTGCACGAATTACCTCC 254 TGTGGTTAAAGCGACCCTCGT ACGAGGTGCACGACTTTTAACCACACCCC 255 CGTTCACACCGGCGTAACTGCTCGCCTACGCGTTCACGCATTTAACCACACCCCCCCC		234	CTGCGTGTCAACAATGTCCCGCAG	CTGCGGGACATTGTTGACACGCAG
237 TITTCGTGATTGCCCGGAGGAGGC GCCTCCTCCGGGCAATCACGAAAA 238 TCGGGATGTAGCTGGGGCTACCGG CCGGTAGCCCCAGCTACATCCCG, 239 CGAGCCAACGCAAACACGTCCTTG CAAGGACGTGTTTGCGTTGGCTCC 240 GCAAAGCCTTTGTGGGGCCGTAGT ACTACCGCCCCACAAAGGCTTTGC 241 ATTCGACCGGAAATGAGGTCTTCG CGAAGACCTCATTTCCGGTCGAAT 242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAGCGAA 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGGGGTCTTCACGCC 244 AACCGTATTCGCGGTCACTTGTG CCACAAGTGACCGCGAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGACCACCCCAAACGGTTGGCCCCAAACGGCTTAAACAGACCAACCGCTAAACAACAACAACAACAACAACAACAACAACAACAACA		235	TCTGGTGCCACGCAAGGTCCACAG	CTGTGGACCTTGCGTGGCACCAGA
238 TCGGGATGTAGCTGGGGCTACCGG CCGGTAGCCCCAGCTACATCCCG, 239 CGAGCCAACGCAAACACGTCCTTG CAAGGACGTGTTTGCGTTGGCTCC 240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACCGCCCCACAAAGGCTTTGC 241 ATTCGACCGGAAATGAGGTCTTCG CGAAGACCTCATTTCCGGTCGAAT 242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAGCGAA 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGGGGTCTTCACGCC 244 AACCGTATTCGCGGTCACTTGTGG CCACAAGTGACCGCGAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGACCACCCCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGCTCCGCCGAACGGTGGCCCCC 249 ACGCACGCGTGACCGAACTTGCTG CAGCAACTTCGGTCACGCGTGCG 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAGCCGCCCCCC 251 TGCGATCGCTAACTGCTGGGACCAA TTGTCCCAGCAGTTGCCA 252 GGAGGTATAAGCGGAGCGGCCTCA TGAGGCCGCTCCGCT		236	CTCCGGGAGGTCACTTAATTGCGG	CCGCAATTAAGTGACCTCCCGGAG
239 CGAGCCAACGCAAACACTCCTTG CAAGGACGTGTTTGCGTTGGCTCC 240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACCGCCCACAAAGGCTTTGC 241 ATTCGACCGGAAATGAGGTCTTCG CGAAGACCTCATTTCCGGTCGAAT 242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAGCGAA 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGGGGTCTTCACGCC 244 AACCGTATTCGCGGTCACTTGTGG CCACAAGTGACCGCGAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGACCACCCC 248 GCGAGGACCGAACTAGACAACGG CCGTTTGTCTAGCCACCCCC 249 ACGCACGCGTACCGAACTGCTC CAGCAACTTCTGGTCCTCGC 249 ACGCACGCGTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTGCCCC 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCCACCCC 252 GGAGGTATAAGCGGAGCGGCCTCA TGAGGCCGCTCCGCT	20	237	TTTTCGTGATTGCCCGGAGGAGGC	GCCTCCTCCGGGCAATCACGAAAA
240 GCAAAGCCTTTGTGGGGCGGTAGT ACTACCGCCCCACAAAGGCTTTGC 241 ATTCGACCGGAAATGAGGTCTTCG CGAAGACCTCATTTCCGGTCGAAT 242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAGCGAA 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGGGGTCTTCACGCC 244 AACCGTATTCGCGGTCACTTGTGG CCACAAGTGACCGCGAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGGACTGCCAGCCGAA 30 247 GGGTGTGGTTAGAATGCACGGTTC GAACCGTGCATTCTAACCACACCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGTTCGGTCCTCGC 249 ACGCACGCGTGACCGAACTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 252 GGAGGTATAAGCGGAGCGCCTCA TGAGGCCGCTCCGCT		238	TCGGGATGTAGCTGGGGCTACCGG	CCGGTAGCCCCAGCTACATCCCGA
241 ATTCGACCGGAAATGAGGTCTTCG CGAAGACCTCATTTCCGGTCGAAT 242 TTCGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAGCGAA 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGGGGTCTTCACGCC 244 AACCGTATTCGCGGTCACTTGTGG CCACAAGTGACCGCGAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGGACTGCCAGCCGAA 30 247 GGGTGTGGTTAGAATGCACGGTTC GAACCGTTTGACCACCCCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGCTCACGCCGA 249 ACGCACGCGTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTCGC 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 252 GGAGGTATAAGCGGAGCGCCTCA TGAGGCCGCTCCGCT		239	CGAGCCAACGCAAACACGTCCTTG	CAAGGACGTGTTTGCGTTGGCTCG
242 TICGCTTGCTGAGTTGCTCTGTTC GAACAGAGCAACTCAGCAAGCGAA 243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGGGGTCTTCACGCC 244 AACCGTATTCGCGGTCACTTGTGG CCACAAGTGACCGCGAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TICGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGGACTGCCAGCCGAA 30 247 GGGTGTGGTTAGAATGCACGGTTC GAACCGTGCATTCTAACCACACCCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGTTCGGTCCTCGC 249 ACGCACGCGTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 252 GGAGGTATAAGCGGAGCGCCTCA TGAGGCCGCTCCGCT		240	GCAAAGCCTTTGTGGGGCGGTAGT	ACTACCGCCCCACAAAGGCTTTGC
243 CGCGTGAAGACCCCATTCCCGAGT ACTCGGGAATGGGGTCTTCACGCC 244 AACCGTATTCGCGGTCACTTGTGG CCACAAGTGACCGCGAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGGACTGCCAGCCGAA 30 247 GGGTGTGTTAGAATGCACGGTTC GAACCGTGCATTCTAACCACACCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGTTCGGTCCTCGC 249 ACGCACGCGTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 252 GGAGGTATAAGCGGAGCGCCTCA TGAGGCCGCTCCGCT		241	ATTCGACCGGAAATGAGGTCTTCG	CGAAGACCTCATTTCCGGTCGAAT
244 AACCGTATTCGCGGTCACTTGTGG CCACAAGTGACCGCGAATACGGTT 245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGGACTGCCAGCCGAA 30 247 GGGTGTGGTTAGAATGCACGGTTC GAACCGTGCATTCTAACCACACCCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGTTCGGTCCTCGC 249 ACGCACGCGTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 35 252 GGAGGTATAAGCGGAGCGGCCTCA TGAGGCCGCTCCGCT	25	242	TTCGCTTGCTGAGTTGCTCTGTTC	GAACAGAGCAACTCAGCAAGCGAA
245 GGGGCCAACCGTTTCGAGGCGTAT ATACGCCTCGAAACGGTTGGCCCC 246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGACTGCCAGCCGAA 30 247 GGGTGTGGTTAGAATGCACGGTTC GAACCGTGCATTCTAACCACACCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGTTCGGTCCTCGC 249 ACGCACGCGTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 252 GGAGGTATAAGCGGAGCGGCCTCA TGAGGCCGCTCCGCT		243	CGCGTGAAGACCCCATTCCCGAGT	ACTCGGGAATGGGGTCTTCACGCG
246 TTCGGCTGGCAGTCCAAACGGCTT AAGCCGTTTGGACTGCCAGCCGAA 30 247 GGGTGTGGTTAGAATGCACGGTTC GAACCGTGCATTCTAACCACACCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGTTCGGTCCTCGC 249 ACGCACGCGTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 252 GGAGGTATAAGCGGAGCGGCCTCA TGAGGCCGCTCCGCT		244	AACCGTATTCGCGGTCACTTGTGG	CCACAAGTGACCGCGAATACGGTT
247 GGGTGTGGTTAGAATGCACGGTTC GAACCGTGCATTCTAACCACACCC 248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGTTCGGTCCTCGC 249 ACGCACGCGTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 252 GGAGGTATAAGCGGAGCGGCCTCA TGAGGCCGCTCCGCT		245	GGGGCCAACCGTTTCGAGGCGTAT	ATACGCCTCGAAACGGTTGGCCCC
248 GCGAGGACCGAACTAGACAAACGG CCGTTTGTCTAGTTCGGTCCTCGC 249 ACGCACGCGTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 252 GGAGGTATAAGCGGAGCGGCCTCA TGAGGCCGCTCCGCT		246	TTCGGCTGGCAGTCCAAACGGCTT	AAGCCGTTTGGACTGCCAGCCGAA
249 ACGCACGCGTGACCGAAGTTGCTG CAGCAACTTCGGTCACGCGTGCGT 250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 252 GGAGGTATAAGCGGAGCGGCCTCA TGAGGCCGCTCCGCT	30	247	GGGTGTGGTTAGAATGCACGGTTC	GAACCGTGCATTCTAACCACACCC
250 TAAAAGGTCGCTTTGAAAGGGGGA TCCCCCTTTCAAAGCGACCTTTTA 251 TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA 252 GGAGGTATAAGCGGAGCGCCTCA TGAGGCCGCTCCGCT		248	GCGAGGACCGAACTAGACAAACGG	CCGTTTGTCTAGTTCGGTCCTCGC
TGCGATCGCTAACTGCTGGGACAA TTGTCCCAGCAGTTAGCGATCGCA  252 GGAGGTATAAGCGGAGCGGCCTCA TGAGGCCGCTCCGCT		249	ACGCACGCGTGACCGAAGTTGCTG	CAGCAACTTCGGTCACGCGTGCGT
35 252 GGAGGTATAAGCGGAGCGCCTCA TGAGGCCGCTCCGCT		250	TAAAAGGTCGCTTTGAAAGGGGGA	TCCCCCTTTCAAAGCGACCTTTTA
253 ATGCTGACATGTCGTGCACCTCGT ACGAGGTGCACGACATGTCAGCAT 254 TGTGGTTAAAGCGTCCGTTCAACG CGTTGAACGGACGCTTTAACCACA 255 CGTTCACACCGGCGTAAGCTGCGT ACGCAGCTTACGCCGGTGTGAACG 256 CCTATCCCGGCGAGAACTTCTGTG CACAGAAGTTCTCGCCGGGATAGG 40 257 GTCTGCACTCACGCAGCGGAGGGA TCCCTCCGCTGCGTGAGTGCAGAC		251	TGCGATCGCTAACTGCTGGGACAA	TTGTCCCAGCAGTTAGCGATCGCA
254 TGTGGTTAAAGCGTCCGTTCAACG CGTTGAACGGACGCTTTAACCACA 255 CGTTCACACCGGCGTAAGCTGCGT ACGCAGCTTACGCCGGTGTGAACG 256 CCTATCCCGGCGAGAACTTCTGTG CACAGAAGTTCTCGCCGGGATAGG 40 257 GTCTGCACTCACGCAGCGGAGGGA TCCCTCCGCTGCGTGAGTGCAGAC	35	252	GGAGGTATAAGCGGAGCGGCCTCA	TGAGGCCGCTCCGCTTATACCTCC
255 CGTTCACACCGGCGTAAGCTGCGT ACGCAGCTTACGCCGGTGTGAACC 256 CCTATCCCGGCGAGAACTTCTGTG CACAGAAGTTCTCGCCGGGATAGG 40 257 GTCTGCACTCACGCAGCGGAGGGA TCCCTCCGCTGCGTGAGTGCAGAC		253	ATGCTGACATGTCGTGCACCTCGT	ACGAGGTGCACGACATGTCAGCAT
256 CCTATCCCGGCGAGAACTTCTGTG CACAGAAGTTCTCGCCGGGATAGG 40 257 GTCTGCACTCACGCAGCGGAGGGA TCCCTCCGCTGAGTGCAGAG		254	TGTGGTTAAAGCGTCCGTTCAACG	CGTTGAACGGACGCTTTAACCACA
40 257 GTCTGCACTCACGCAGCGGAGGGA TCCCTCCGCTGCGTGAGTGCAGAC		255	CGTTCACACCGGCGTAAGCTGCGT	ACGCAGCTTACGCCGGTGTGAACG
		256	CCTATCCCGGCGAGAACTTCTGTG	CACAGAAGTTCTCGCCGGGATAGG
258 GCACGAGTTGGTGCTCGGCAGATT AATCTGCCGAGCACCAACTCGTGC	40	257	GTCTGCACTCACGCAGCGGAGGGA	TCCCTCCGCTGCGTGAGTGCAGAC
		258	GCACGAGTTGGTGCTCGGCAGATT	AATCTGCCGAGCACCAACTCGTGC

	259	AACGTCGCACGACACACGTTCGTC	GACGAACGTGTGTCGTGCGACGTT
	260	ATGCGCGCTTATCCTAGCATGGTC	GACCATGCTAGGATAAGCGCGCAT
	261	TCACGTTTTCGTCTCGACATGAGG	CCTCATGTCGAGACGAAAACGTGA
	262	TGTGCCTCATCCTTAGGATACGGC	GCCGTATCCTAAGGATGAGGCACA
5	263	AGGTGGTGTGGGTCAACCGCTTTA	TAAAGCGGTTGACCCACACCACCT
	264	CTGGATCGAAGGGACTGCAAGCTC	GAGCTTGCAGTCCCTTCGATCCAG
	265	TAGATCAACTCGCGTACGCATGGA	TCCATGCGTACGCGAGTTGATCTA
	266	GATCCTGCGGAGAGAGAGAGTGCAG	CTGCACTCTCTTCTCCGCAGGATC
	267	TACGTGTGGAGATGCCCCGAACCG	CGGTTCGGGGCATCTCCACACGTA
10	268	GCGCTATGTCAATCGTGGGCGTAG	CTACGCCCACGATTGACATAGCGC
I	269	AGCGAGGTTTCTAGCGTCGACACC	GGTGTCGACGCTAGAAACCTCGCT
	270	ACCCAGGTTTTGCCGTTGTGGAAT	ATTCCACAACGGCAAAACCTGGGT
	271	CCCTGTTAACGGCTGCGTAGTCTC	GAGACTACGCAGCCGTTAACAGGG
	272	AGGCCGATTTCACCCGCCAATTGC	GCAATTGGCGGGTGAAATCGGCCT
15	273	GAGCCCTCACTCCTTGCCCTTTGA	TCAAAGGGCAAGGAGTGAGGGCTC
	274	GGGTGGACATCCGCCTCGCAGTCA	TGACTGCGAGGCGGATGTCCACCC
	275	GATGGCTGAGAACCGTGCTACGAT	ATCGTAGCACGGTTCTCAGCCATC
	276	TCGACGTTAGGAGTGCTGCCAGAA	TTCTGGCAGCACTCCTAACGTCGA
	277	CGAATGGGTCTGGACCTTGCATAG	CTATGCAAGGTCCAGACCCATTCG
20	278	GTGCACCAGACATTCGAACTCGGA	TCCGAGTTCGAATGTCTGGTGCAC
	279	AGAGGCCCCGTATATCCCATCCAT	ATGGATGGGATATACGGGGCCTCT
	280	AACGCCTGTTCAGAGCATCAGCGG	CCGCTGATGCTCTGAACAGGCGTT
•	281	AAGGCTCAACACGCCTATGTGCGC	GCGCACATAGGCGTGTTGAGCCTT
	282	AGTCCGTGTTGCCAGATTGGCTCG	CGAGCCAATCTGGCAACACGGACT
25	283	ATGTCCCATGTAAAGACGCGTGTG	CACACGCGTCTTTACATGGGACAT
	284	ATGGAGTCTGCTCACGCCCAAAGG	CCTTTGGGCGTGAGCAGACTCCAT
	285	CGGCCTCCAACAAGGAGCACTAAC	GTTAGTGCTCCTTGTTGGAGGCCG
	286	CAGAGCCGTGGCAACATTGCGAGC	GCTCGCAATGTTGCCACGGCTCTG
	287	TCATTTGAATGAGGTGCGCACCGG	CCGGTGCGCACCTCATTCAAATGA
30	288	GACGTACCGGAAGCGCCGTATAAA	TTTATACGGCGCTTCCGGTACGTC
	289	ATGCGAGCAATGGGATCCGGATTC	GAATCCGGATCCCATTGCTCGCAT
	290	AGAGTGAGGCCTCCCTGACCAGTG	CACTGGTCAGGGAGGCCTCACTCT
	291	CGCACCGTAAGTAGATTTGCCCGC	GCGGGCAAATCTACTTACGGTGCG
j	292	TGAACCTTTGAGCACGTCGTGCGC	GCGCACGACGTGCTCAAAGGTTCA
35	293	TCCGCCTTTTTGGTTACCTCGAAG	CTTCGAGGTAACCAAAAAGGCGGA
	294	GAACGCCAACGGCACTAACACATC	GATGTGTTAGTGCCGTTGGCGTTC
	295	CCGACAGCAGCCAAGACGTCCCAG	CTGGGACGTCTTGGCTGCTGTCGG
i	296	CATAAAAAACCTGGGGCTCTGCG	CGCAGAGCCCCAGGTTTTTTATG
ľ	297	TGCCAACTGTGCAGACCGGACTTA	TAAGTCCGGTCTGCACAGTTGGCA
40	298	GGCGAAAGAGCGAAACCGGCTCGT	ACGAGCCGGTTTCGCTCTTTCGCC
Į	299	GGGATGCGTATTTTAGCGAACACG	CGTGTTCGCTAAAATACGCATCCC

	300	TGGGATTCAGCGACCAGTACGCGA	TCGCGTACTGGTCGCTGAATCCCA
	301	CCCGATATTCGCCCGGCCTATTCG	CGAATAGGCCGGGCGAATATCGGG
	302	CGAGAAGATGCCTCACGCAACCAA	TTGGTTGCGTGAGGCATCTTCTCG
	303	AACCTTGACCCGTGGATGACGCTA	TAGCGTCATCCACGGGTCAAGGTT
5	6	TTGCAACGGGCTGGTCAACGTCAA	TTGACGTTGACCAGCCCGTTGCAA
	7	CGCATAGGTTGCCGATTTCGTCAA	TTGACGAAATCGGCAACCTATGCG
	306	GCTTCCGGATGAACGGGATGGTTG	CAACCATCCCGTTCATCCGGAAGC
	307	CCCTCCATGTTCTTCGAACGGTTT	AAACCGTTCGAAGAACATGGAGGG
	308	TTGATGGGCGGCAATGCTCTTGCT	AGCAAGAGCATTGCCGCCCATCAA
10	309	ATTGTGAGATGCGCCAAATTCCCC	GGGGAATTTGGCGCATCTCACAAT
	310	TCAGCACAGCCAGACGGTCAACTT	AAGTTGACCGTCTGGCTGTGCTGA
	311	ACTCCACTCCTCGGTGGCAAACTA	TAGTTTGCCACCGAGGAGTGGAGT
	312	TCTGGGCATGCCTGGACGGAGACG	CGTCTCCGTCCAGGCATGCCCAGA
	313	TCTCAACTCCGGTACGACGAAACA	TGTTTCGTCGTACCGGAGTTGAGA
15	314	TTGCGTGGTCAAAGGCGCAACGTG	CACGTTGCGCCTTTGACCACGCAA
	315	AGACAGCGATCCGCGGCTCATGAT	ATCATGAGCCGCGGATCGCTGTCT
	316	CGCGTCTCTAACTGAGAGCAGCCA	TGGCTGCTCTCAGTTAGAGACGCG
	317	AGGCGCACATGTACGGACATTCAG	CTGAATGTCCGTACATGTGCGCCT
	318	GATGAGTGGCACGTCGGTGTGTAA	TTACACACCGACGTGCCACTCATC
20	319	TGATCCATATTGTCGGACGTTGCG	CGCAACGTCCGACAATATGGATCA
	320	ACCTGCCGGGAGTTCATAGGCTAG	CTAGCCTATGAACTCCCGGCAGGT
	321	AGCATTGGCGTTTTTCCGCAACGA	TCGTTGCGGAAAAACGCCAATGCT
	322	GGTAATATTCAGCGCGACCGCTCA	TGAGCGGTCGCGCTGAATATTACC
	323	ATAGCGTACGACGAGGTGACGCGC	GCGCGTCACCTCGTCGTACGCTAT
25	324	TAGGTCACGATGCGTTTGACGCTA	TAGCGTCAAACGCATCGTGACCTA
	325	ACTGCCCGTACCTCTGGTTCTGGC	GCCAGAACCAGAGGTACGGGCAGT
	326	CCTTTGGCCTGAAGTTGTCGTAGC	GCTACGACAACTTCAGGCCAAAGG
	327	GTGCCCACGAGCGTATCGTTGTA	TACAACGATACGCTCGTGGGGCAC
	328	AGGCGCTACGTGGGCCTGGAGCAA	TTGCTCCAGGCCCACGTAGCGCCT
30	329	GGGTGCTACCATTGCATTAGTCCG	CGGACTAATGCAATGGTAGCACCC
	330	ACCACGCGCGTACGTGTAACCGAG	CTCGGTTACACGTACGCGCGTGGT
	331	CCATGATGCATTGGGTGCATTTAG	CTAAATGCACCCAATGCATCATGG
	332	GGTCCGGCCCTACGAAACGTTCGA	TCGAACGTTTCGTAGGGCCGGACC
	333	CCGTGTGGCTGGAGATTCGTGTGA	TCACACGAATCTCCAGCCACACGG
35	334	GTTAGGGCGACGCATATTGGCACA	TGTGCCAATATGCGTCGCCCTAAC
	335	GGGTCAGTCAGGTGCGTTAGGATC	GATCCTAACGCACCTGACTGACCC
	336	GCCGTGAAGTCGAATGCAGATCGA	TCGATCTGCATTCGACTTCACGGC
	337	GCCACCACCAGTGCATTCAGGTA	TACCTGAATGCACTGGGTGGTGGC
	338	GAGCTTAGTTTGCGGTCATCGGGC	GCCCGATGACCGCAAACTAAGCTC
40	339	TGTTTGCCGCCATTAGGGAGTAAC	GTTACTCCCTAATGGCGGCAAACA
	340	GCTCCGCTGGATGTGCCGGTTTAG	CTAAACCGGCACATCCAGCGGAGC

•	341	CGGTAGCATGCGAGATCCCTGTTA	TAACAGGGATCTCGCATGCTACCG
	342	CTACGCTCTACCAGTTGCCTGCGA	TCGCAGGCAACTGGTAGAGCGTAG
	343	GTGCCTCCTGCTGTATTTGCCAAG	CTTGGCAAATACAGCAGGAGGCAC
	344	TTGCGACTCGACTTGGACGAGTAG	CTACTCGTCCAAGTCGAGTCGCAA
5	345	TCTGGGAGCTGTTTACTCCAGCCA	TGGCTGGAGTAAACAGCTCCCAGA
•	346	TGCACGCGGAACTCCCTTTACCAT	ATGGTAAAGGGAGTTCCGCGTGCA
	347	TGGCAGCAAATGAATCGAAAGCAC	GTGCTTTCGATTCATTTGCTGCCA
	348	AACTGGTGACGCGGTACAGCGAAG	CTTCGCTGTACCGCGTCACCAGTT
	349	AGACGATTACGCTGGACGCCGTCG	CGACGCCTCCAGCCTAATCGTCT
10	350	ATGCCCTCCTTCATGGAAAGGGTT	AACCCTTTCCATGAAGGAGGGCAT
	351	ATTCTCGGAGCGTATGCGCCAGAA	TTCTGGCGCATACGCTCCGAGAAT
	352	ATAGCGGAGTTTGGGTACGCGAAC	GTTCGCGTACCCAAACTCCGCTAT
	353	ACCTACGCATACCGCTTGGCGAGG	CCTCGCCAAGCGGTATGCGTAGGT
	354	GATTACCTGAATGGCCAAGCGAGC	GCTCGCTTGGCCATTCAGGTAATC
15	355	CCTGTTAGCATCACGGCGCTTAGG	CCTAAGCGCCGTGATGCTAACAGG
	356	CGGAATGATGCGCTCGACAACGCT	AGCGTTGTCGAGCGCATCATTCCG
	357	TGAGAGAGGCGTTGGTTAAGGCAA	TTGCCTTAACCAACGCCTCTCTCA
	358	AAGCAGGCGAAGGGATACTCCTCG	CGAGGAGTATCCCTTCGCCTGCTT
	359	TCACGACAGACGGGCCGAGATTAC	GTAATCTCGGCCCGTCTGTCGTGA
20	360	AAGCAATTTGGCCTCGTTTTGTGA	TCACAAAACGAGGCCAAATTGCTT
	361	GCTGGTTGCGGTAGGATCGCATAT	ATATGCGATCCTACCGCAACCAGC
	362	TTGTGAATCCGTTCTGTCCCCGAC	GTCGGGGACAGAACGGATTCACAA
	363	TGGGCTCCTCTGAGGCGAGATGGC	GCCATCTCGCCTCAGAGGAGCCCA
	364	GGATAGAGTGAATCGACCGGCAAC	GTTGCCGGTCGATTCACTCTATCC
25	365	TGCACCGAACGTGCACGAGTAATT	AATTACTCGTGCACGTTCGGTGCA
	366	GCCAGTATTCTCGGGTGTTGGACG	CGTCCAACACCCGAGAATACTGGC
	367	TCGCTACCTAAGACCGGGCCATAC	GTATGGCCCGGTCTTAGGTAGCGA
	368	TGGCATTGACGAGCAGCAGTCAGT	ACTGACTGCTGCTCAATGCCA
	369	CGCGTCCCAGCGCCCTTGGAGTAT	ATACTCCAAGGGCGCTGGGACGCG
30	370	ATGAAGCCTACCGGGCGACTTCGT	ACGAAGTCGCCCGGTAGGCTTCAT
]	371	CCAGACAGATGGCCTGGAACCATG	CATGGTTCCAGGCCATCTGTCTGG
	372	TGGCGTGGGACCATCTCAAAGCTA	TAGCTTTGAGATGGTCCCACGCCA
	373	CCGCATGGGAACACGTGTCAAGGT	ACCTTGACACGTGTTCCCATGCGG
	374	GCCCACTCGTCAGCTGGACGTAAT	ATTACGTCCAGCTGACGAGTGGGC
35	375	ATTACGGTCGTGATCCAGAAAGCG	CGCTTTCTGGATCACGACCGTAAT
	376	TGCGAGGTGAGCACCTACGAGAGA	TCTCTCGTAGGTGCTCACCTCGCA
	377	GGGCCGCATTCTTGATGTCCATTC	GAATGGACATCAAGAATGCGGCCC
l	378	CCTCGGATGTGGGCTCTCGCCTAG	CTAGGCGAGAGCCCACATCCGAGG
ļ	379	TAGGCATGTTGGCGTGAGCGCTAT	ATAGCGCTCACGCCAACATGCCTA
40	380	CGATACGAACGAGGATGTCCGCCT	AGGCGGACATCCTCGTTCGTATCG
	381	TACGCCGGTTAGCACGGTGCGCTA	TAGCGCACCGTGCTAACCGGCGTA

	382	CATACGATGTCCGGGCCGTGTCGC	GCGACACGGCCCGGACATCGTATG
	383	ATCCGCAGTTGTATGGCGCGTTAT	ATAACGCGCCATACAACTGCGGAT
	384	GGGTAAGGGACAAAGATGGGATGG	CCATCCCATCTTTGTCCCTTACCC
	385	ATTGGAGTGTTTTGGTGAATCCGC	GCGGATTCACCAAAACACTCCAAT
5	386	GAACCGAGCCAACGTATGGACACG	CGTGTCCATACGTTGGCTCGGTTC
	387	GCCGTCAAGCTTAAGGTTTTGGGC	GCCCAAAACCTTAAGCTTGACGGC
	388	ACCTGCTTTTGGGTGGGTGATATG	CATATCACCCACCCAAAAGCAGGT
1	389	AATCGTGGGCGCAGCAAACGTATA	TATACGTTTGCTGCGCCCACGATT
	390	GTCGCCGGATTGCTCAGTATAAGC	GCTTATACTGAGCAATCCGGCGAC
10	391	ACCCGTCGATGCTTCCTCCTCAGA	TCTGAGGAGGAAGCATCGACGGGT
	392	ATCCGGGTGGGCGATACAAGAGAT	ATCTCTTGTATCGCCCACCCGGAT
	393	TTCCGCATGAGTCAGCTTTGAAAA	TTTTCAAAGCTGACTCATGCGGAA
	394	GCAAAGTCCCACTGGCAAGCCGAT	ATCGGCTTGCCAGTGGGACTTTGC
	395	CGACCTCGGCTTCATCGTACACAT	ATGTGTACGATGAAGCCGAGGTCG
15	396	CTCATGAGCGCAGTTGTGCGTGAG	CTCACGCACAACTGCGCTCATGAG
	397	CAGATGAAGGATCCACGGCCGGAG	CTCCGGCCGTGGATCCTTCATCTG
	398	TCAAAGGCTCTTGGATACAGCCGT	ACGGCTGTATCCAAGAGCCTTTGA
	399	TCCGCTAATTTCCAATCAGGGCTC	GAGCCCTGATTGGAAATTAGCGGA
i.	8	CCGTTTGCGGTCGTCCTTGCTCAA	TTGAGCAAGGACGACCGCAAACGG
20	9	TTCGCTTTCGTGGCTGCACTTCAA	TTGAAGTGCAGCCACGAAAGCGAA
	402	CTTAGTTGGGGCGCGGTATCCAGA	TCTGGATACCGCGCCCCAACTAAG
i	403	GCTCTAATGCCGTGGAGTCGGAAC	GTTCCGACTCCACGGCATTAGAGC
ı	404	CCGATTACAAATTGACTGACCGCA	TGCGGTCAGTCAATTTGTAATCGG
	405	AGACGTACGTGAGCCTCCCGTGTC	GACACGGGAGGCTCACGTACGTCT
25	406	AATGGAGCGATACGATCCAACGCA	TGCGTTGGATCGTATCGCTCCATT
	407	GGAGGCGCTGTACTGATAGGCGTA	TACGCCTATCAGTACAGCGCCTCC
	408	TGTTTTGAATTGACCACACGGGA	TCCCGTGTGGTCAATTCAAAAACA
	409	CATGTCTGGATGCGCTCAATGAAG	CTTCATTGAGCGCATCCAGACATG
	410	GCCCGCTAATCCGACACCCAGTTT	AAACTGGGTGTCGGATTAGCGGGC
30	411	CCATTGACAGGAGAGCCATGAGCC	GGCTCATGGCTCTCCTGTCAATGG
	412	GAATCACCGAATCACCGACTCGTT	AACGAGTCGGTGATTC
	413	AACCAGCCGCAGTAGCTTACGTCG	CGACGTAAGCTACTGCGGCTGGTT
	414	TTTTCTGAGGGACACGCGGGCGTT	AACGCCCGCGTGTCCCTCAGAAAA
	415	GGTGCTCCGTTTGATCGATCCTCC	GGAGGATCGATCAAACGGAGCACC
35	416	CCGCTTAGGCCATACTCTGAGCCA	TGGCTCAGAGTATGGCCTAAGCGG
	417	TAAGACATACCGACGCCCTTGCCT	AGGCAAGGGCGTCGGTATGTCTTA
	418	GTTCCCGACGCCAGTCATTGAGAC	GTCTCAATGACTGGCGTCGGGAAC
}	419	TAAAAGTTTCGCGGAGGTCGGGCT	AGCCCGACCTCCGCGAAACTTTTA
	420	CGGTCCAGACGAGCTGAGTTCGGC	GCCGAACTCAGCTCGTCTGGACCG
40	421	CGGCGTAGCGGCTACGGACTTAAA	TITAAGTCCGTAGCCGCTACGCCG
Į	422	GCTTGGATGCCCATGCGGCAAGGT	ACCTTGCCGCATGGGCATCCAAGC

	423	AGCGGGATCCCAGAGTTTCGAAAA	TTTTCGAAACTCTGGGATCCCGCT
	424	GAGCTTGAGAGCGAGGTCATCCTC	GAGGATGACCTCGCTCTCAAGCTC
	425	GCATCGGCCGTTTTGACCATATTC	GAATATGGTCAAAACGGCCGATGC
	426	CATAGCGCTGCACGTTTCGACCGC	GCGGTCGAAACGTGCAGCGCTATG
5	427	ACCCGACAACCACCAATTCAAAAA	TTTTGAATTGGTGGTTGTCGGGT
	428	GCGAACACTCATAAGAGCGCCCTG	CAGGGCGCTCTTATGAGTGTTCGC
	429	CCGCCGAGTGTAGAGAGACTCCGA	TCGGAGTCTCTCTACACTCGGCGG
	430	GACATCGGGAGCCGGAAACATGAG	CTCATGTTTCCGGCTCCCGATGTC
	431	TCGTGTAGACTCGGCGACAGGCGT	ACGCCTGTCGCCGAGTCTACACGA
10	432	ATGCGCATATACTGACTGCGCAGG	CCTGCGCAGTCAGTATATGCGCAT
	433	ACAAGCGAACCCGAGTTTTGATGA	TCATCAAAACTCGGGTTCGCTTGT
	434	GCATGAGACTCCGCGAAGACATGT	ACATGTCTTCGCGGAGTCTCATGC
	435	TCCTACATGTCGCGTCACGATCAC	GTGATCGTGACGCGACATGTAGGA
	436	GACCGATCGCGAAGTCGTACACAT	ATGTGTACGACTTCGCGATCGGTC
15	437	GTCGCCAGGACTGGGCCGATGTGA	TCACATCGGCCCAGTCCTGGCGAC
	438	ACCGATAAGACTTGCATCCGAACG	CGTTCGGATGCAAGTCTTATCGGT
	439	TCCATAACCAGTCCGAAGTGCCGG	CCGGCACTTCGGACTGGTTATGGA
	440	ACGCGCCCTGCATCTCGTATTTAA	TTAAATACGAGATGCAGGGCGCGT
	441	AGACCGCATCAATTGGCGCGTACC	GGTACGCGCCAATTGATGCGGTCT
20	442	AGAGGCTTGGCAAGTAGGGACCCT	AGGGTCCCTACTTGCCAAGCCTCT
	443	GCAATGGACGCCAGACGATACCGG	CCGGTATCGTCTGGCGTCCATTGC
	444	GCTGGACTTAGTCGTGTTCGGCGG	CCGCCGAACACGACTAAGTCCAGC
	445	AGGCATCGTGCCGGATTGCTCCCT	AGGGAGCAATCCGGCACGATGCÇT
	446	TGCGCATGTCGACGTTGAACAAAG	CTTTGTTCAACGTCGACATGCGCA
25	447	TTCGGGTCACATCCGATGCCATAC	GTATGGCATCGGATGTGACCCGAA
	448	ACCCATCGCCGGAAAGCGATGTTG	CAACATCGCTTTCCGGCGATGGGT
	449	AAGCGCTGACTCGGCTAAGAATCA	TGATTCTTAGCCGAGTCAGCGCTT
	450	ACTTCCAAGTCCTTGACCGTCCGA	TCGGACGGTCAAGGACTTGGAAGT
	451 .	TCTCAATATTCCCGTAGTCGCCCA	TGGGCGACTACGGGAATATTGAGA
30	452	AACAGTTCCTCTTTTTCCTGGCGC	GCGCCAGGAAAAAGAGGAACTGTT
	453	CGTCCTCCATGTTGTCACGAACAG	CTGTTCGTGACAACATGGAGGACG
	454	TGCGCAGACCTACCTGTCTTTGCT	AGCAAAGACAGGTAGGTCTGCGCA
	455	ATGGACGGCTTCGCAGTCCTCCTT	AAGGAGGACTGCGAAGCCGTCCAT
	456	TGAACGCTTTCTATGGGCCACGTA	TACGTGGCCCATAGAAAGCGTTCA
35	457	TGAACCCTGCCGCGAGCGATAACC	GGTTATCGCTCGCGGCAGGGTTCA
	458	GTTCTTGCGCGATGAATCAGGACC	GGTCCTGATTCATCGCGCAAGAAC
ļ	459	AGGGTACGTGTCGCAGCTTCGCGT	ACGCGAAGCTGCGACACGTACCCT
	460	ACCCTTGCTCCGCCATGTCTCTCA	TGAGAGACATGGCGGAGCAAGGGT
	461	GGGACAAGGATTGAAGCTGGCGTC	GACGCCAGCTTCAATCCTTGTCCC
40	462	TGTCGTTGCTCCCGAGTACCATTG	CAATGGTACTCGGGAGCAACGACA
ł	463	GTTGTCCGAGACGTTTGTGTCAGC	GCTGACACAACGTCTCGGACAAC

	464		GCTGGTGAACACTCACGAACCGCT	AGCGGTTCGTGAGTGTTCACCAGC
	465		GCAGACAGGGCAAATCGGTGCAAA	TITGCACCGATTTGCCCTGTCTGC
	466		CCCATCACAACGAGTGGCGACTTT	AAAGTCGCCACTCGTTGTGATGGG
	467		GCTTCTACAGCTGGCGTGCTAGCG	CGCTAGCACGCCAGCTGTAGAAGC
5	468		GAATGTGTGCCGACCATTCTAGCC	GGCTAGAATGGTCGGCACACATTC
	469		CCAGCGGAAGTTAGAGCTCTGTGG	CCACAGAGCTCTAACTTCCGCTGG
	470		TTTTTACCGACCACTCCATGTCGG	CCGACATGGAGTGGTCGGTAAAAA
	471		GCGGCTATGTGATGACGGCCTAGC	GCTAGGCCGTCATCACATAGCCGC
	472		AGTACACGGGCGTGTTAGCGCTCC	GGAGCGCTAACACGCCCGTGTACT
10	·473		TCCTGTGTGGTGGCGCACTCCCAC	GTGGGAGTGCGCCACACACAGGA
	474		CCAACTAACCAATCGCGCGGATGA	TCATCCGCGCGATTGGTTAGTTGG
	475		AGTGAGTGACCAAGGCAGGAGCAA	TTGCTCCTGCCTTGGTCACTCACT
	476		CATCTTTCGCGGAGTTTATTGCGG	CCGCAATAAACTCCGCGAAAGATG
	477		CTTCGTCCGGTTAGTGCGACAGCA	TGCTGTCGCACTAACCGGACGAAG
15	478		CTCACGAAAACGTGGGCCCGAAAT	ATTTCGGGCCCACGTTTTCGTGAG
	479		CGCAGCAGCTGAACTCTAGCATTG	CAATGCTAGAGTTCAGCTGCTGCG
	480		AGGAGACATACGCCCAAATGGTGC	GCACCATTTGGGCGTATGTCTCCT
	481		ATTGAGAACTCGTGCGGGAGTTTG	CAAACTCCCGCACGAGTTCTCAAT
	482		CTCTTTGTAGGCCCAGGAGGAGCA	TGCTCCTCGGGCCTACAAAGAG
20	483		GCCGCAGGGTCGATAATTGGTCTA	TAGACCAATTATCGACCCTGCGGC
	484		AAACGCCGCCCTGAGACTATTGGG	CCCAATAGTCTCAGGGCGGCGTTT
	485		CTGAGTTGCCTGGAACGTTGGACT	AGTCCAACGTTCCAGGCAACTCAG
	486		CGGATGGGTTGCAGAGTATGGGAT	ATCCCATACTCTGCAACCCATCCG
	487		CTGACCTTTGGGGGTTAGTGCGGT	ACCGCACTAACCCCCAAAGGTCAG
25	488		GGAAATGAGAACCTTACCCCAGCG	CGCTGGGGTAAGGTTCTCATTTCC
	489		AACGCATCGTCCGTCAACTCATCA	TGATGAGTTGACGGACGATGCGTT
	490		TGGAGAGAGACTTCGGCCATTGTT	AACAATGGCCGAAGTCTCTCCA
	491		TTGCGCTCATTGGATCTTGTCAGG	CCTGACAAGATCCAATGAGCGCAA
	492		AGCGCGTTAAAGCACGGCAACATT	AATGTTGCCGTGCTTTAACGCGCT
30	493		AGCCAGTAAACTGTGGGCGGCTGT	ACAGCCGCCCACAGTTTACTGGCT
	494		CGACTGATGTGCAACCAGCAGCTG	CAGCTGCTGGTTGCACATCAGTCG
	495		GGTTGCTCATACGACGAGCGAGTG	CACTCGCTCGTCGTATGAGCAACC
		10	GTCCAACGCGCAACTCCGATTCAA	TTGAATCGGAGTTGCGCGTTGGAC
		11	TTGCCGCACCGTCCGTCATCTCAA	TTGAGATGACGGACGGTGCGGCAA
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	499		AAAGGAGCTTTCGCCCAACGTACC	GGTACGTTGGGCGAAAGCTCCTTT
	500		AGTGATTGTGCCACTCCACAGCTC	GAGCTGTGGAGTGGCACAATCACT
	501		GCGATCGTCGAGGGTTGAGCTGAA	TTCAGCTCAACCCTCGACGATCGC
	502		GGGAGACAGCCATTATGGTCCTCG	CGAGGACCATAATGGCTGTCTCCC
40	503		GAGACGCTGTCACTCCGGCAGAAC	GTTCTGCCGGAGTGACAGCGTCTC
	504		CCACCGGTCGCTTAAGATGCACTT	AAGTGCATCTTAAGCGACCGGTGG

	505	CGGCATAACGTCCAGTCCTGGGAC	GTCCCAGGACTGGACGTTATGCCG
	506	AAGCGGAACGGGTTATACCGAGGT	ACCTCGGTATAACCCGTTCCGCTT
	507	TGCACACTAGGTCCGTCGCTTGAT	ATCAAGCGACGGACCTAGTGTGCA
	508	AGGGAACCGCGTTCAAACTCAGTT	AACTGAGTTTGAACGCGGTTCCCT
5	509	GAATTACAACCACCCGCTCGTGTT	AACACGAGCGGGTGGTTGTAATTC
	510	TTCAGTGCTCACGAAGCATGGATT	AATCCATGCTTCGTGAGCACTGAA
	511	TTAGTTTGGCGTTGGGACTTCACC	GGTGAAGTCCCAACGCCAAACTAA
	512	AATGCGACCTCGACGAGCCTCATA	TATGAGGCTCGTCGAGGTCGCATT
	513	CCGAAACCGTTAACGTGGCGCACA	TGTGCGCCACGTTAACGGTTTCGG
10	514	TAAAGTAACAAGGCGACCTCCCGC	GCGGGAGGTCGCCTTGTTACTTTA
•	515	TAATGATTTTAGTCGCGGGGTGGG	CCCACCCGCGACTAAAATCATTA
	516	GGCTACTCTAAGTGCCCGCTCAGG	CCTGAGCGGGCACTTAGAGTAGCC
	517	TGGCGGACGACTCAATATCTCACG	CGTGAGATATTGAGTCGTCCGCCA
	518	GGGCGTTAGGCGTAATAGACCGTC	GACGGTCTATTACGCCTAACGCCC
15	519	GCCACCTTTAGACGGCGGCTCTAG	CTAGAGCCGCCGTCTAAAGGTGGC
	520	GAGATGTGTAAACGTGCAGGCACC	GGTGCCTGCACGTTTACACATCTC
	521	TAGCTCGTGGCCCTCCAAGCGTGT	ACACGCTTGGAGGGCCACGAGCTA
	522	GTGTCGGCGCTATTTGGCCTTACC	GGTAAGGCCAAATAGCGCCGACAC
	523	CCAGGGAAGCAACTGGTTGCCATT	AATGGCAACCAGTTGCTTCCCTGG
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	525	GCAAACCCGGTAACCCGAGAGTTC	GAACTCTCGGGTTACCGGGTTTGC
	526	GCAAATGGCGTCATGCACGAACGT	ACGTTCGTGCATGACGCCATTTGC
	527	AGTACTTTCGCGCCCAGTTTAGGG	CCCTAAACTGGGCGCGAAAGTACT
	528	AAGATCTGCGAGGCATCCCGGCTT	AAGCCGGGATGCCTCGCAGATCTT
25	529	GCAAGTGTATCGCACAGTGCGATT	AATCGCACTGTGCGATACACTTGC
	530	CCGACAAGGCCTCAATTCATTCTG	CAGAATGAATTGAGGCCTTGTCGG
	531	GTCTCGTCTCAACTTTAAGGCGCG	CGCGCCTTAAAGTTGAGACGAGAC
	532	ATCCAGAGATCCGTTTTGCAGCGT	ACGCTGCAAAACGGATCTCTGGAT
	533	GTCACCAGGAGGGAAGTTTCACCC	GGGTGAAACTTCCCTCCTGGTGAC
30	534	TTCCGTCAGGCGGATCAACGGAAT	ATTCCGTTGATCCGCCTGACGGAA
	535	ATGCCGGACACGCATTACACAGGC	GCCTGTGTAATGCGTGTCCGGCAT
	536	TGGGCCGCTTGGCGCTTTCATAGA	TCTATGAAAGCGCCAAGCGGCCCA
	537	CCTAGCGCGAGCTTTACTGACCAG	CTGGTCAGTAAAGCTCGCGCTAGG
	538	TTGGCCAGGAATATGGTCTCGAGA	TCTCGAGACCATATTCCTGGCCAA
35	539	GTCTGCGGCCGACTTGCTATGCAT	ATGCATAGCAAGTCGGCCGCAGAC
	540	AACTTGCTCATTCTCAAGCCGACG	CGTCGGCTTGAGAATGAGCAAGTT
	541	ACGTCAGCGATTGTGGCGAAATAT	ATATTTCGCCACAATCGCTGACGT
	542	ACGGCCTGCGTCAGCACATGCATC	GATGCATGTGCTGACGCAGGCCGT
	543	ATACCTCCGCAGAACCATTCCGTT	AACGGAATGGTTCTGCGGAGGTAT
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	545	TGCTCAATTTGTGCAGAAAACGCC	GGCGTTTTCTGCACAAATTGAGCA

	546	TTATCGCGAGAGACGACCGTGTCC	GGACACGGTCGTCTCTCGCGATAA
	547	GACGCGACGTGAGTAGTGGAAGCG	CGCTTCCACTACTCACGTCGCGTC
	548	ATGGTAGGGCATTGGGCTTTCCT	AGGAAAGCCCAATGCCCCTACCAT
	549	CCAAATATAGCCGCGCGGAGACAT	ATGTCTCCGCGCGGCTATATTTGG
5	550	GCAAACCCTGATTGAATCGTGCCC	GGGCACGATTCAATCAGGGTTTGC
	551	TAGCGTCTTGCGTGAAACCATGGG	CCCATGGTTTCACGCAAGACGCTA
	552	CCACCCGACAGCGCTGGACTCTT	AAGAGTCCAGCGCTGTCGGGGTGG
	553	ACGAGCACTGAAGGCTGCTTTACG	CGTAAAGCAGCCTTCAGTGCTCGT
	554	CATATCAGCGTCGTCTAGCTCGCG	CGCGAGCTAGACGACGCTGATATG
10	555	TGATCCCGGACCGGCTAGACTAAT	ATTAGTCTAGCCGGTCCGGGATCA
	556	GGCCCGACACTACAGGGTAATCA	TGATTACCCTGTAGTGTCGGGGCC
	557	GGCTCCAGGGCGAGATTATGAATG	CATTCATAATCTCGCCCTGGAGCC
	558	CAAAATCCGATGGGCGGAAAATTA	TAATTTTCCGCCCATCGGATTTTG
	559	CACAGGCGCATAGGGAGCAAGCTA	TAGCTTGCTCCCTATGCGCCTGTG
15	560	TAGCTATTGCCCCGATGGGCTACT	AGTAGCCCATCGGGGCAATAGCTA
	561	TGGTACGCGGTCCATAGCAAGTCG	CGACTTGCTATGGACCGCGTACCA
	562	GACGCTGTGGCTCGGAAACTGTTC	GAACAGTTTCCGAGCCACAGCGTC
	563	CCTGGGTTCGCCGCGTGGTAACTG	CAGTTACCACGCGGCGAACCCAGG
	564	TTCCCGCGTAGCCCAACAGCTATA	TATAGCTGTTGGGCTACGCGGGAA
20	565	TTCGCGGATTGCTGCCGCATAACA	TGTTATGCGGCAGCAATCCGCGAA
•	566	AAAAATGGCACCGAAGTTGAGGCA	TGCCTCAACTTCGGTGCCATTTTT
	567	CATTCCGCGCGAGTTGAAATCCAG	CTGGATTTCAACTCGCGCGGAATG
	568	ACGCACGTTTTTTGGCACGGTTAA	TTAACCGTGCCAAAAAACGTGCGT
	569	TGTCCATGACGTCGTTTCTCTGGT	ACCAGAGAAACGACGTCATGGACA
25	570	TCTCAGTCGGACTCGTATGCCAGA	TCTGGCATACGAGTCCGACTGAGA
	571	CTCCAAACGCACACATCAAGCATC	GATGCTTGATGTGTGCGTTTGGAG
	572	TTCAACCAAGCGGGGTGTTCGTGA	TCACGAACACCCCGCTTGGTTGAA
	573	GGTGTCGGAGGGTGGTGACCTCGA	TCGAGGTCACCACCCTCCGACACC
	574	AGCGCTTTTGGTCATGATTTGCAA	TTGCAAATCATGACCAAAAGCGCT
30	575	CCGAGGACTTACGTCTGCCCAGGA	TCCTGGGCAGACGTAAGTCCTCGG
	576	GCCCAATCCAGTTCTTATGCGCCC	GGGCGCATAAGAACTGGATTGGGC
	577	CGGGTTAACCCACGCAAGTTATGA	TCATAACTTGCGTGGGTTAACCCG
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	582	CGCGGTGTTTTGTCTAGGTGCCGG	CCGGCACCTAGACAAAACACCGCG
	583	CAACATTGTGGTGGCACTCCATCC	GGATGGAGTGCCACCACAATGTTG
	584	CGATACGCGCCGGTTTGTTAAATC	GATTTAACAAACCGGCGCGTATCG
40	585	GGCTATAAACGTGCGGACTGCTCC	GGAGCAGTCCGCACGTTTATAGCC
[	586	TGGGTAAATCACTATTGCGCGGTT	AACCGCGCAATAGTGATTTACCCA

	587	GTCTTCATCGGCCCGCGCAAGCTA	TAGCTTGCGCGGGCCGATGAAGAC
	588	GCGACACCCTGTACTCTGATGC	GCATCAGAGTACAGGGTGTGTCGC
	589	GTAGCAGGGTCCGCAAGACCAAGC	GCTTGGTCTTGCGGACCCTGCTAC
	590	TCGCCAACGCAGGGTAACTGCCAT	ATGGCAGTTACCCTGCGTTGGCGA
5	591	ACTCCGAAGCTTCGAGCGGCACGA	TCGTGCCGCTCGAAGCTTCGGAGT
	12	CATCGTCCCTTTCGATGGGATCAA	TTGATCCCATCGAAAGGGACGATG
	13	GCACGGGAGCTGACGACGTGTCAA	TTGACACGTCGTCAGCTCCCGTGC
	594	ATCATCCCACGGCAGAGTGAAGAG	CTCTTCACTCTGCCGTGGGATGAT
	595	CGCTGGACTGGCCTATCCGAGTCG	CGACTCGGATAGGCCAGTCCAGCG
10	596	CGGTCTCAGCAACACTGTCGCAAA	TTTGCGACAGTGTTGCTGAGACCG
	597	CGAACGTTCTCCGATGTAATGGCC	GGCCATTACATCGGAGAACGTTCG
	598	ATACCGTGCGACAAGCCCCTCTGA	TCAGAGGGGCTTGTCGCACGGTAT
	599	AGCTCATTCCCGAGACGGAACACC	GGTGTTCCGTCTCGGGAATGAGCT
	600	TTTCATGCGGCCGTTGCAAATCAT	ATGATTTGCAACGGCCGCATGAAA
15	601	ACTCGAACGGACGTTCAATTCCCA	TGGGAATTGAACGTCCGTTCGAGT
	602	CTGCATGGTGTGGGTGAGACTCCC	GGGAGTCTCACCCACACCATGCAG
	603	CCGCGAGTGTGGATGGCGTGTTGA	TCAACACGCCATCCACACTCGCGG
	604	AATGTGTCGGTCCTAAGCCGGGTG	CACCGGCTTAGGACCGACACATT
	605	TAAGACGAGCCTGCACAGCTTGCG	CGCAAGCTGTGCAGGCTCGTCTTA
20	606	GGCGTGGGAGGATAAGACGATGTC	GACATCGTCTTATCCTCCCACGCC
	607	TGCTCCATGTTAGGAACGCACCAC	GTGGTGCGTTCCTAACATGGAGCA
	608	CGGTGTTGGTCGGACTGACGACTG	CAGTCGTCAGTCCGACCAACACCG
	609	CCGCGCGTATCTATCAGATCTGGG	CCCAGATCTGATAGATACGCGCGG
	610	AAAGCATGCTCCACCTGGAGCGAG	CTCGCTCCAGGTGGAGCATGCTTT
25	611	ACTTGCATCGCTGGGTAGATCCGG	CCGGATCTACCCAGCGATGCAAGT
	612	TGCTTACGCAGTGGATTGGTCAGA	TCTGACCAATCCACTGCGTAAGCA
	613	ATGCAGATGAACAAATCGCCGAAT	ATTCGGCGATTTGTTCATCTGCAT
	614	GCAATTCTGGGCCATGTATTCGTC	GACGAATACATGGCCCAGAATTGC
F	615	AGGGTTCCTTACGCGTCGACATGG	CCATGTCGACGCGTAAGGAACCCT
30	616	GTGGAGCTAATCGCGAGCCTCAGA	TCTGAGGCTCGCGATTAGCTCCAC
	617	TCGTAGTCTCACCGGCAATGATCC	GGATCATTGCCGGTGAGACTACGA
•	618	TTATAGCAGTGCGCCAATGCTTCG	CGAAGCATTGGCGCACTGCTATAA
	619	CGAACAGTGCTGTCCGTCGCTCAA	TTGAGCGACGGACAGCACTGTTCG
	620	TCCGCGTGGACTGTTAGACGCTAT	ATAGCGTCTAACAGTCCACGCGGA
35	621	CATTAGCCCGCTGTCGGTAACTGT	ACAGTTACCGACAGCGGGCTAATG
	622	GGAAAGAAACTCAGACGCGCAATG	CATTGCGCGTCTGAGTTTCTTTCC
	623	CGACTCGCTGGACAGGAGAATCGT	ACGATTCTCCTGTCCAGCGAGTCG
	624	CATGATCCTCTGTTTCACCCGCGG	CCGCGGGTGAAACAGAGGATCATG
	625	GGCGTAGCGCTCTAAAAGCTTCGG	CCGAAGCTTTTAGAGCGCTACGCC
40	626	AGTGATGCCATCAGGCCCGTATAC	GTATACGGGCCTGATGGCATCACT
[	627	TATGGAAAGGGCAACAGCGCTATC	GATAGCGCTGTTGCCCTTTCCATA

631 GGCGCAATGGGCGCATAAATACTA TAGTATTTATGCGCCCATTGCGCC 632 GGTCAATTCGCGCTACATGCCCTA TAGGGCATGTAGCGCGAATTGACC 633 GATGGTGGACTGGAGCCCTTCCGC GCGGAAGGGCTCCAGTCCACCATC 634 CCGCGCATAGCGCAATAGGGGAGA TCTCCCCTATTGCGCTATGCGCGG 635 TCTTCTGGCTGTCCGGCACCCGAA TTCGGGTGCCGGACAGCCAGAAGA 636 GCGTTCGCAATTCACGGGCCCTTA TAAGGGCCCGTGAATTGCGAACGC 637 TCGTTTCGGCCTTGGAGAGTATCG CGATACTCTCCAAGGCCGAAACGA 638 AGGTGCAAGTGCAAGGCGAGAGGC GCCTCTCGCCTTGCACTTGCACCT 639 CGCCAGTTTCGATGGCTGACGTTT AAACGTCAGCCATCGAAACTGGCG 640 GCTTTACCGCCGATCCCAGATATC GATATCTGGGATCGGCGGTAAAGC 641 GTGCTTGACGAAGAGGCGAAATGT ACATTTCGCCTCTTCGTCAAGCAC				
630 CAGGCCGAACCACGGGTTACAG 631 GGCGCATTGGGCCTG 631 GGCGCATTGGGCGCATAAATACTA TAGTATTTATGCGCCCATTGCGCC 632 GGTCAATTCGCGCTACATTGCCCTA TAGGGCATGTAGCGCCATTGCGCC 633 GATGGTGGACTGGAGCCCTTCCGC GCGGAAGGGCTCCAGCTCACCATC 634 CCGCGCATAGCGCAATTAGGGGACA TCTCCCCTATTGCGCTATTGCCCGG 635 TCTTCTGGCTGTCCGGCACCCGAA TCGGGCCCTTATGCGCGGAAGACGAAGAA 636 CGGTTCGCAATTCACGGGCCCTTA TAGGGCCGTGAATTGCAGCGC 637 TCGTTTCGGCTGTCAGGGCCCTTA TAGGGCCGTGAATTGCAGCGC 638 AGGTGCAAGTCAAGGGGACAGGC GCCTTAGAGGCCCAAACGA 639 CGCCAGTTCGAAGTCAGGGGACAGC 639 CGCCAGTTCGATGCAGGCGCCTTA AAACGTCAAGCCACTTGCACCT 639 CGCCAGTTCGATGCAGGCGAAGGC 640 GCTTTACCGCCGATCCCAGATATC GATATCTGCAAGCCACTTGCACCT 641 GTGCTTGACGCGCTTCATGTCCTCA TAACGGCATCGAAACGA 641 GTGCTTGACCACGAATATC AACATTTGCCTCTTCTCAAGCAC 642 CAGTCCGTACCACTCCAAGATGT ACATTTCGCCTTTGTCAAGCAC 643 TACGCGTAAGAGCCCAACATGT ACATTTCGCCTTTTGTCAAGCAC 644 GGCGAGTCTTGTGGGGACATGTT ACACATGTCCCCAAGACTCGCA 645 CCAAAGCGAAGCCAACATGT ACACATGTCCCCAAGACTCGCC 646 GCCGTAAGGTGCACCGTACCACTGCAAC 647 AAATCCGCGAAGCCGTCCCAAC GTCGGGAAGAGCACCTACGGC 648 GGCTTCGCACCGTACCCAAC GTCGGGAAAGACACCTACGGC 649 TGTAGAGTCCCACGTACCAAC GTCGGGAAACGAACCTACGGC 649 TGTAGAGTCCCACGTACCAATTTAC 640 GCCTTAGGTCTGGCGGCAATTTAC 641 GGCTTCGCCCAACGTACCCAAC GTCGGGAAACCTACCGC 642 CAATCCGCCACGTACCCAAC GTCGGGAACACCTACGGC 643 TGTACAGGCCACCGTACCAATTTAC 644 GGCTTCGCCCACGTACCAATTTAC 645 CCAATAGTCTGGGGCAACGTACAAC 656 CACTAGTCTGGGGCAAGGTCAAT TAGCACTTCCCCCAAACCTACGC 647 AAATCCGCCAAGCCCGTACCAATTTAC 650 CACTAGTCTGGGAAGCCCGTAA TAGCCCTTCCCCCAACACTAGTG 651 TGTACTCGGCAGGCGCAATTGAAT 651 TGTACTCGGCAAGCGCGCAATTGAAC 652 AACGGGTATCGAAGCCCGTAACACTTCCCCCAGACTACCCGTT 653 CGGACTCCCCGTTTCCAACACGGCCAACTTCCCCCAGACTACCCGTT 654 ATGCATCGACACTAACACGAAGACCC 655 ATGCACTACCCGGACGCCCGTAA TACCCGTTCCCCCAGACTACCCGTT 655 ATGCACTACCACGAGCCCGTAA TACCCTTCCCCAGACTACCCGTT 656 ATGCACTTCCGCAGCACGAGGCCCGTAA TACCCGTTCTAACACCGGCGAAGGCCCAATGCACGAGACGCCCGAAGGCCCCTAACGACCACCGAGGACTCCACGAGCACTCCCCCGGAAGGCCCCTAACGACGCCGAAGGCCCAAGGACACGAGACACCACGAGACTCCACGGGCCACTCCCCCGAAGGCCCCTACGACGCCCGAAGGCCCACGAGGCCCACTCCCCCCAACGAAGCCCCCGAAGGCCCACGAGGCCCAC		628	CTGTGGTTGATGGAGGATCCACAC	GTGTGGATCCTCCATCAACCACAG
631 GGCGCAATGGGCGCTACATACTAC TAGTATTTATGCGCCCATTGCGCC 632 GGTCAATTCGCGCTACATGCCCTA TAGGGCATGTAGCGCGAATTGACC 633 GATGGTGGACTGGAGCCCTTCCGC GCGGAAGGGCTCCAGTCCACCATC 634 CCGCCGCATAGCGCCACCCGAA TTCGGGTGCCGCACTGGCGCACCCGAA TCTCGCCCTATTGCGCCGCACCCGAA TCTCGCCTATTGCGCCAGCAGCCCAATACCGCCACCCGAA TTCGGGTGCCGCACCCGAA TCTCGCCTATTGCGCCGCACCCGAA TCTCGCCTATTGCGCCAGCAGCAAGAAGAA 636 GCGTTCGCAATTCACGGGCCCTTA TAAGGGCCCGTAATTGCGACGC 637 TCGTTTCGGCCTTTGGAGAGTATCG CGATACTCTCCAAGCCCGAAACGA 638 AGGTGCAAGTGCAAGGCGAGAGGC GCCTCTCGCCTTGGACTTGACATGCCG 639 CGCCAGTTTCGATGGCTGACGTTT AAACGTCAGCCATGCAAACCGA 639 CGCCAGTTTCGATGGCTGACGTTT AAACGTCAGCACTAGAAACTGGCG 640 GCTTTACCGCCGATCCCAGATATC GATATTCTGGACTGACACTGAGCAC 641 GTGCTTGACGAAGAGGCGAAATGT ACATTTCGCCTCTTCGTCAAGCAC 642 CACTCCGTGCGCTTCATGTCCTCA TGAGGACATGAAGCCACCGACCTACCT 643 TACGCGTAAGAGCCTACCCTCGCG CGCGAGGGTAGGCCTTTACGCCTG 644 GGCGAGTCTTGTGGGGACATGTGT ACACATGTCCCCACAAGACTCGCCC 645 CCAAAGCGAAGCGAGCGTGTCTAT ATAGACACGCTCGCTTTCGCTTCG 646 GCCGTAAGGTTGCCTTCACCGAAC GTTCGGTTACGCCT 647 AAATCCGCGATGTCCGTTTCACCGAAC AGCCTCCCCACAAGACTCCGGC 648 GGCTTCGGATGCCGTTACCAATTTAC CTAAATTGGTACGGCAAACCACCGGCCACATGCCGGC 649 TGTAAGAGTCCCCCTACCAATTTAC CTAAATTGGTACGGCTACAACCACCGGCACATACCGGC 649 TGTAAGAGTCCCCCTACCAATTTAC CTAAATTGGTACGGCACAACCACCGGCACCAAGACCACCCCGTACCAATGTTAC CTAAATTGGTACCGGCACAACCACCGGCACATACCCGGTACCAATGTCCACAACCACCACGACCCCGTTACCAATTTAC CTAAATTGGTACCGGCACAACCACCACGACCCCGTACCAAGACCACCACCACCACCACCACCACCACCACCACCA		629	ACTCGCTGGAATTTGCGCTGACAC	GTGTCAGCGCAAATTCCAGCGAGT
632 GGTCAATTCGCGCTACATGCCCTA TAGGGCATGTAGCGCGAATTGACC 633 GATGGTGGACTGGAGCCCTTCCGC GCGGAAGGGCTCCAGTCCACCATC 634 CCGCGCATAGCGGACACCCGAA TCTCCCCTATTGCGCTGG 635 TCTTCTGGCTGTCCGGCACCCGAA TCTCCCCTATTGCGCTGG 636 GCGTTCGCAATTCACGGGCCCTTA TAAGGGCCCGTGAATTGCGAACGC 637 TCGTTTCGGCCTTGGAGAGTATCG CGATACTCTCCAAGGCCGAAACGA 638 AGGTGCAAGTGCAAGGCGAGAGGC GCCTCTCGCCTTGCACTTGCACCT 639 CGCCAGTTTCGATGGCTGACGTTT AAACGTCAGCCATCGAAACTGACC 639 CGCCAGTTTCGATGGCTGACGTTT AAACGTCAGCCATCGAAACTGACC 640 GCTTTACCGCCGATATC GATATCTGGGATCGGCGGAAACGA 641 GTGCTTGACGATGCCAGATATC ACATTCTGGGATCGCCGGAAACTG 642 CAGTCCGTGCGATCCCAGATATC ATATCTGGGATCGCCGGAACGA 643 TACGCGTAAGAGGCGAAATGT ACATTCTGGCTCTTAAGCAC 644 GGCGAAGCGAAGGCGAAATGT ACATTCGCCGTAAGCCACCACAGACTCGCC 645 CCAAAGCGAAGCGACCCTCCGCG CGCGAGGGTAGGCCTTTACGCGTA 646 GCCGTAAGATGTGTATACCACAAC GTTCCCCACAAGACTCGGCC 647 AAATCCGCGATGTGTCTAATTAACACACGCTCGCTTTCGGCTGAAGACACCACACACCTCGGC 648 GGCGTAGGTTGCTCTACCACAAC GTTCCGTTCGGTTCG		630	CAGGCCCGAACCACGCGGTTACAG	CTGTAACCGCGTGGTTCGGGCCTG
633 GATGGTGGACTGGAGCCTTCCGC GCGGAAGGGCTCCAGTCCACCATC 634 CCGCGCATAGCGCAATAGGGGAGA TCTCCCCTATTGCGCTGGCGG 635 TCTTCTGGCTGTCCGGCACCCGAA TTCGGGTGCCGGACAGCCAGAAGA 636 GCGTTCGCAATTCACGGGCCCTTA TAAGGGCCCGTAATTGCGAACGA 637 TCGTTTCGGCCTTGGAGAGTTCG CGATACTCTCCAAGGCCGAAACGA 638 AGGTGCAAGTGCAAGGCGACAGGC GCCTCTCGCCTTGCACTTGCACTC 639 CGCCAGTTTCGATGGCTGACGTTT AAACGTCAGCCATCACACTC 639 CGCCAGTTTCGATGGCTGACGTTT AAACGTCAGCCATCACACTCGCC 640 GCTTTACCGCCGATCCCAGATATC GATATTCTGGATCGGCGGTAAAGC 641 GTGCTTGACGAAGAGGCGAAATGT ACATTTCGGCTCTTCGCAAGCAC 642 CAGTCCGTGCGCTTCATCTCCTCA 643 TACGCCTAGAGAGCCGAAATGT ACACATTTCGCCTCTTCGCAGCACT 644 GGCGAGTCTTGTGGGGACATGTT ACACATGTCCCCACAAGACTCGCC 645 CCAAAGCGAAGCGACATGTGT ACACATGTCCCCACAAGACTCGCC 646 GCCGTAGGTTGTCTTTCACCGAC GTCGGGTAAGCCACTCGCT 647 AAATCCGCGATGTCCTTCACCGAC GTCGGTGAGAGCAACCTACGGC 648 TGTAGAGTCCCACGTACCAATTTAG CTACATTGGGACTCGCGACAGACCTCGCC 649 TGTAGAGTCCCACGTACCAATTTAG CTACATTGGGACTCACA 650 CACTAGTCTGGGGCAAGAGGCACTCACCACTCCGCACACACA		631	GGCGCAATGGGCGCATAAATACTA	TAGTATTTATGCGCCCATTGCGCC
634 CCGCGCATAGCGCAATAGGGGAGA 635 TCTTCTGGCTGTCCGGCACCCGAA 636 GCGTTCGCAATTCACGGGCCCTTA 637 TCGTTTCGGCCTTGCAAGTATCG 638 AGGTGCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	5	632	GGTCAATTCGCGCTACATGCCCTA	TAGGGCATGTAGCGCGAATTGACC
635 TCTTCTGGCTGTCCGGCACCCGAA  636 GCGTTCGCAATTCACGGGCCCTTA  637 TCGTTTCGGCCTTGGAGAGTATCG  638 AGGTGCAAGTCCAGGGCGAGAGGC  639 CGCCAGTTTCGATGCGTTGAACAGCT  640 GCTTTACCGCCGATCCCAGATATC  641 GTGCTTGACGACGCGAAACGA  641 GTGCTTGACGAAGAGCGAAATCT  642 CAGTCCGTCGCGTTCATGTCCTCA  643 TACGCGTAAGAGCCGAAATCT  644 GGCGATTCTCATGTCCTCA  645 CCAAAGCGAAGAGCCGAAATCT  646 GCCGTTGCGCTTCATGTCCTCA  647 AAATCCGCGAAGAGCCGAAATCT  648 GCCGAAGCCTCCCCGCG  649 TACAACGCAACAGCCGAAATCT  646 GCCGTAGGACCTTCCCTCGCG  647 AAATCCGCGAAGCCGACATGTT  648 GCCTTCGCCCTTCACCCTCCGC  649 TGTACAGCCACCCTCGCGACCCTCCGCGCACACGCACCCTCCGCC  649 TGTACAGCGACCCCTCCCCGACCCTCCCGCCCCCCCCCC		633	GATGGTGGACTGGAGCCCTTCCGC	GCGGAAGGGCTCCAGTCCACCATC
638 GCGTTCGCAATTCACGGGCCCTTA  637 TCGTTTCGGCCTTGGAGAGTATCG  638 AGGTGCAAGTGCAAGGCGAGAGGC  639 CGCCAGTTTCGATGGCTGACGTTT  640 GCTTTACCGCCGATCCCAGATATC  641 GTGCTTGACGATCCCAGATATC  642 CAGTCCGTGCGTTCATGCCTCA  643 TACGCGTAGAGAGGC  644 GCGTTGACGAGAGAGGC  645 CAGTCCGTCCCAGATATC  646 GCCGTAGAGAGCCAAGACGC  647 TACGCGTGAGACTCCAAGATATC  648 GCGGAAGTCTTGAGAGCTGACCT  649 TACGCGTAGAGAGCCAACCTCCAC  640 GCCGTAGAGAGCCTACCCTCCC  641 GTGCTTGACGAGAGAGCCAACTGCTCA  642 CAGTCCGTGCGCTTCATGTCCTCA  643 TACGCGTAGAGACCTACCCTCCCC  644 GCCGAAGCCAACACCTCCCC  645 CCAAAGCGAAGCCACCCTCCCC  646 GCCCTAGGTTGCTCTTCACCCAAC  646 GCCCTAGGTTGCTCTTCACCCAAC  647 AAATCCGCGATCTCTCTCACCCAAC  648 GCCTTAGCTCTCTCACCCAAC  649 TGTAGAGTCCCACCGTGCGAT  649 TGTAGAGTCCCACCGTACCAATTTAG  650 CACTAGTCGGGCAAGAGTCATT  651 TGTACTCGGCAAGAGCCAATAGATT  651 TGTACTCGGCAAGAGCCAAAAGACT  652 AACGGGTATCGGAAGCCGAAAAGACT  653 CGGACTGCCCGTTTGAACACCAACCACCCGCAACACCACCCGGCAATACAC  654 ATCGTTCAGCAACTAGATT  655 ATGCATCGAACTAGATT  656 ATGCATCGAACTAGATT  657 GTGCACATTAGAGAGAGCCCGTAA  667 GTGCGAACTAGATT  668 CTCCATCGTCCAACTAGATT  669 CTCCATCTCCGAACCAGACCCGTAA  660 CCGTGGGAACCTGAACACC  660 CCGTGGGAACCTGAACCCGTAACACCCGCCCGAACCATCCCGGAACCATCCCGGAACCATCCCGGCAACCATCCCGGCAACCATCCCGGAACCATCCCGGCAACCACCACCACCACCACCACCACCACCACCACC		634	CCGCGCATAGCGCAATAGGGGAGA	TCTCCCCTATTGCGCTATGCGCGG
10 637 TCGTTTCGGCCTTGGAGAGTATCG CGATACTCTCCAAGGCCGAAACGA 638 AGGTGCAAGTGCAAGGCGAGAGGC GCCTCTCGCTTGCACTTGCACCT 639 CGCCAGTTTCGATGGCTGACGTTT AAACGTCAGCCATCGAAACTGGCG 640 GCTTTACCGCCGATCCCAGATATC GATATCTGGGTGAGGCGTAAAGC 641 GTGCTTGACGAAGAGGCGAAATGT ACATTTCGGCCTTCGTCAAGCAC 642 CAGTCCGTGCGCTTCATGTCCTCA TGAGGACAGGCGCACGGACTG 643 TACGCGTAAGAGCCTACCCTCGCG GCGGAGGGTAGGCTCTTACGCGCTA 644 GGCGAGTCTTGTGGGGACATGTT ACACATGCCCCACAAGACTCGCC 645 CCAAAGCGAAGCGAGCGTGTCTAT ATAGACACGCTCGCTCGCG 646 GCCGTAGGTTGCTCTCACCGAC GTTCGGTAAGAGCCACAGACTCGCC 647 AAATCCGCGATGTGCCTTCACCGAC GTTCGGTAAGAGCACCCTTCGCT 648 GGCTTCGCACCCGTACCATTTAG 649 TGTAGAGTCCCACCATTTAG 650 CACTAGTCTGGGGCAAGGTCCATTTAGTACGACAC 651 TGTACTCGGCACCGTACCATTTTAG 651 TGTACTCGGCAGCGCAATTAATGCACCTCCCCACAGACTCACGC 652 AACGGGTATCGGGCAAGGTCCATT 653 CGGACTGCCGTTCGCACCATTTAA 650 CACTAGTCTGGGGCAAGGTCATT 654 ATCGTTCAGGAAGCGCAATAGATT 655 AACGGGTATCGGAAGCCGAATAGATT 656 CGGACTGCCCGTTACAAGACCGCCCAAACACCCGTACACAGACCCCTACA 656 CGGACTGCCCGTTTGCAAGTTGAG 656 TTCCAGGCACTGAAGCCCGTAA 657 GTGCGACACTAGTCGAACGACCCGTAA 658 TTCCAGGCACTGAAGACCCGTAA 659 AATGCACCGAACATGATGCGGAAGCC 658 CTCATCTTAAGGAGAGAGCC 658 CTCATCGTCAGAGAGCCCGTAA 659 AATGCACCACACACAGAGCCC 659 AATGCACCACCACCACCACCC 669 CTCACCTTCCCCCACACCACGACACTT 660 CCGTGGGAGGGAACCCCGTAA 661 AAATTCTCGTTGGCGGTGATCCA 662 TTCCAGGCATTCACCACCGAGG 663 TTCAACGGCGGAATCCACCGAGG 664 AAATTCCTTTGCTCCACGATCCC 665 CCCGTGGGAGGGAACCCCGTAA 7TGCATCCACCACGAGGCCCTAA 7TGCATCCACCACGAGAGCCC 666 CCGTGGGAGGGAACCCCGTAACCCAGGGCCCTAATTCCCCCCACGACTAGTTCCACACGACCACCACGAGACACACGAAGACCCC 666 CCGTGGGAGGGAACCCCGTAACCCAGGGCCCTAATTCCCCCCACGACTAGTTCCCCCACGACACCACGAGACACACGAACACGAACACGAGACACACGAGACACACGAGACACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACGAACACCAC		635	TCTTCTGGCTGTCCGGCACCCGAA	TTCGGGTGCCGGACAGCCAGAAGA
638 AGGTGCAAGTGCAAGGCGAGAGGC GCCTCTCGCCTTGCACTTGCACCT 639 CGCCAGTTTCGATGGCTGACGTTT AAACGTCAGCCATCGAAACTGGCG 640 GCTTTACCGCCGATCCCAGATATC GATATCTGGGATCGGCGGTAAAGC 641 GTGCTTGACGAAGAGGCGAAATGT ACATTTCGCCTCTTCGTCAAGCAC 641 GTGCTTGACGAAGAGGCGAAATGT ACATTTCGCCTCTTCGTCAAGCAC 642 CAGTCCGTGCCTTCATGTCCTCA TGAGGACATGAAGCCCACGGACTG 643 TACGCGTAAGAGCCTACCCTCGCG CGCGAGGGTAGGCCTTTACGCGTA 644 GGCGAGTCTTGTGGGGACATGTGT ACACATGTCCCCACAAGACTCGCC 645 CCAAAGCGAAGCGAGCGTGTCTAT ATAGACACGCTCGCTCGCTTTGGTTTGG		636	GCGTTCGCAATTCACGGGCCCTTA	TAAGGCCCGTGAATTGCGAACGC
639 CGCCAGTTTCGATGGCTGACGTTT AAACGTCAGCCATCGAAACTGGCG 640 GCTTTACCGCCGATCCCAGATATC GATATCTGGGATCGGCGGTAAAGC 641 GTGCTTGACGAAGAGGCGAAATGT ACATTTCGCCTCTTCGTCAAGCAC 641 GTGCTTGACGAAGAGGCGAAATGT ACATTTCGCCTCTTCGTCAAGCAC 642 CAGTCCGTGCGCTTCATGTCCTCA TGAGGACATGAAGCGCACGGACTG 643 TACGCGTAAGAGCCTACCCTCGCG CGCGAGGGTAGGCTCTTACGCGTA 644 GGCGAGTCTTTGTGGGGACATGTT ACACATGTCCCCACAGACTCGCC 645 CCAAAGCGAAGCGAGCGTGTCTAT ATAGACACGCTCGCTTCGCT	10	637	TCGTTTCGGCCTTGGAGAGTATCG	CGATACTCTCCAAGGCCGAAACGA
640 GCTTTACCGCCGATCCCAGATATC GATATCTGGGATCGGCGGTAAAGC 641 GTGCTTGACGAAGAGGCGAAATGT ACATTTCGCCTCTTCGTCAAGCAC 642 CAGTCCGTGCGCTTCATGTCCTCA TGAGGACATGAAGGCCACGGACTG 643 TACGCGTAAGAGCCTACCCTCGCG CGCGAGGGTAGGCTCTTACGCGTA 644 GGCGAGTCTTGTGGGGACATGTGT ACACATGTCCCCACAAGACTCGCC 645 CCAAAGCGAAGCGAGCGTGTCTAT ATAGACACGCTCGCTTTCGCTTTGG 646 GCCGTAGGTTGCTCTTCACCGAAC GTTCGGTAAAGACCACCTTCGCTTTTGG 647 AAATCCGCGATGTGCCGTAAGACT AGCCTCACGGCACATCCGGCACTTCGCTTTGG 648 GGCTTCGCACCCGTACCAATTTAG CTAAATTGGTACGGGTGCGAAGCC 649 TGTAGAGTCCCACGTAGCCGCAT ATGCCGCGACTCTACA 650 CACTAGTCTGGGGCAAGGTGCATT AATGCACCTTGCCCCAGACTACTACA 650 CACTAGTCTGGGGCAAGGTGCATT AATGCACCTTGCCCCAGACTACTG 651 TGTACTCGGCAGGCGCAATAGATT AATCCACCTTGCCCCAGACTACTG 652 AACGGGTATCGGAAGCGTAAAAGC GCTTTTACGCTCCCAGACTACTT 653 CGGACTGCCCGTTTGCAAGTTGAG CTCAACTTGCAACACGGCAGTACA 654 ATCGTTCAGCACTGGAGCCGCAA 655 ATGCATCGAACTAGTCGTGACGC 656 ATGCATCGAACTAGTCGTGACGC 657 ATGCATCGAACTAGTCGTGACGC 658 CTCACACTTGCACACTAGATT 659 AATGCACCTTACCCACATCCC GGGATCACGACTAGTTCGAAC 659 AATGCACTCTCACCACACCCC GGGATCCCCTCTCCTTAATGCCTGGAA 650 CTCATCGTCCTACACCACACCCC GGGATCACGACTAGTTCGACA 651 CTCATCGTCCACACCACACCCC GGGATCCTCCCCCAGC 652 AATGCACTCCACCACACCCCC GGGATCCCCCTCCCCCACCACCACTAGTTCCCCCCACACCACCACCACCACCACCACCACCACCACC		638	AGGTGCAAGTGCAAGGCGAGAGGC	GCCTCTCGCCTTGCACTTGCACCT
641 GTGCTTGACGAAGAGGCGAAATGT ACATTTCGCCTCTTCGTCAAGCAC 642 CAGTCCGTGCGCTTCATGTCCTCA TGAGGACATGAAGCGCACGGACTG 643 TACGCGTAAGAGCCTACCCTCGCG CGCGAGGGTAGGCTCTTACGCGTA 644 GGCGAGTCTTGTGGGGACATGTT ACACATGTCCCCACAAGACTCGCC 645 CCAAAGCGAAGCGAGCGTGTCTAT ATAGACACGCTCGCTTCGCT		639	CGCCAGTTTCGATGGCTGACGTTT	AAACGTCAGCCATCGAAACTGGCG
15 642 CAGTCCGTGCGCTTCATGTCCTCA 643 TACGCGTAAGAGCCTACCTCGCG CGCGAGGGTAGGCTCTTACGCGTA 644 GGCGAGTCTTGTGGGGACATGTGT ACACATGTCCCCACAAGACTCGCC 645 CCAAAGCGAAGCGAGCGTGTCTAT ATAGACACGCTCGCTTTCGCTTTGG 646 GCCGTAGGTTGCTCTTCACCGAAC GTTCGGTGAAGAGCAACCTACGGC 647 AAATCCGCGATGTGCCGTAGGCT AGCCTCACGGCACATTCGCGGATTT 648 GGCTTCGCACCCGTACCAATTTAG CTAAATTGGTACGGGAAGCCTACCAACTACGGC 649 TGTAGAGTCCCACGTAGCCGGCAT ATGCCGGCTACGTGGGATCTACA 650 CACTAGTCTGGGGCAAGAGTGCATT AATGCACCTTGCCCCAGACTAGTG 651 TGTACTCGGCAGGCGCAT AATCTATTGCGCCTGCCAGACTAGTG 652 AACGGGTATCGGAAGCCTAAAAGC GCTTTTACGCTTCCGATACCCGTT  653 CGGACTGCCCGTTTGCAAGTTGAG 654 ATCGTTCAGCACTGGAGCCCGTAA TTACGGGCTCCAGTGCCGGT 655 ATGCATCGAACTAGTCGTGACGGC CTCAACTTGCAACAGGGCACTAGTCCG 656 ATCCATCGTCCTACACGAGCCCGTAA TTACGGGCTCCAGTTCGATGCAGT 656 TTCCAGGCATTACGGAGCCCGTAA TTACGGGCTCCAGTTCGATGCAGT 656 TTCCAGGCATTAAGGAGAGGGAGC GCCGTCACGACTAGTCCGAACGAT 656 TTCCAGGCATTACTCCACGATCC GGGATTCTCGTTAGACGTC GGGATCTCCTTAATGCCTGGAA  30 657 GTGCGACATCTACTCCACGATCC GGGATCTCTCTTAATGCCTGGAA  658 CTCATCGTCCTAACACGAAGGCC GGGCTCCCTTTTAGGACGATGCAC 659 AATGGCACTTCGTCGCGGTGATCCA TTGCATCGCCGCAAGAATTT  660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCCCACGG  661 AAATTCTCGTTGGTGCACGTCAA TTGCATCACCGCCGAAGTTCCC GGGCTCCCCTCCTCCTCCCCACGG  662 TTGCTCTTATCCTTGCCCGCGC CCCCAGGACAAGGATACGAA  663 TTAAGGATCAGGCGGAGCTTCCA TTGCACCCCTGACCTTAA  664 CGCGACTAAGGTGCTGCAACTCCA CTCGAGTTGCAGCCCTTAA  665 CTCCATCTTCATCCTCCACCGACC CTCGGTTGGATTCCCTCCCACGG  665 GCTCGATTTCACGCCCCTTTTTCCCTTCCACGCC CGCCCAGGACAAGGATACGAAA  666 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCACCCTTTAA  666 CGCGACTAAGGTGCTGCAACTCGA TTGACCCTCTCCTCACCCCC  666 AGCAGAGTGCGTTGCAAGCCCAA TTAAGGCCCTCACCAACCGACGCC  666 AGCAGAGTGCGTTGCAACTCGA TTAAGTGCACCTCTCCCCCCCTCCCCCCCCCC		640	GCTTTACCGCCGATCCCAGATATC	GATATCTGGGATCGGCGGTAAAGC
643 TACGCGTAAGAGCCTACCTCGCG CGCGAGGGTAGGCTCTTACGCGTA 644 GGCGAGTCTTGTGGGGACATGTGT ACACATGTCCCCACAAGACTCGCC 645 CCAAAGCGAAGCGAGCGTGTCTAT ATAGACACGCTCGCTTTGG 646 GCCGTAGGTTGCTCTTCACCGAAC GTTCGGTGAAGACACCTACGGC 647 AAATCCGCGATGTGCCGTGAGGCT AGCCTCACGGCACATCCGCGATTT 648 GGCTTCGCACCCGTACCAATTTAG CTAAATTGGTACGGGTGCGAAGCC 649 TGTAGAGTCCCACGTAGCCGGCAT ATGCCGGCACATCGCGGATCTACA 650 CACTAGTCTGGGGCAAGAGTGCATT AATGCACCTTGCCCAGACTACTG 651 TGTACTCGGCAGGCGCAT ATGCCGGCTACCTGCCAGACTACTG 652 AACGGGTATCGGAAGCGTAAAAGC GCTTTTACGCCTGCCGAGTACA 653 CGGACTGCCCGTTTGCAAGTTGAG 654 ATCGTTCAGCACTGGAGCCCGTAA 655 ATGCATCGAACTAGTGAG 656 TTCCAGGCATCAGTGAGCCCGTAA 657 GTGCGACATCATGTGAGGCCCGTAA 658 CTCATCGTCAACACGGAGCCCGTAA 659 AATGGCACTTCACAGAGGGAGC 658 CTCATCGTCCAGAGCCC 659 AATGGCACTTCACACAGAGGCCC 669 AATGGCACTTCCACGAGCCC 660 CCCTGGGAGGCCCATA 660 CCGTGGGAGGAGCCC 661 AAATTCTCGTCGACGAGCCC 662 ATGCATCACACGAGAGCCC 663 ATGCATCACACGAGAGCCC 664 CCCTGGGAGCACATCATCCACACGAGAGCCC 665 ATTCCAGGCATCACACCGAGG 666 AAATTCTCGTTGGTGACGGC 667 CCGCCAGGACCACGAGACCA 668 TTAAGGACCTTCCGCGGCGCCCTCAT 669 CCGTGGGAGGAATCCAACCGAGG 660 CCGTGGGAGGAATCCAACCGAGG 661 AAATTCTCGTTGGTGACGCC 662 CCCCAGGACAAAGGATACAACGAG 663 TTAAGGATCAGCGGCCCGTAA 664 CGCGACTAAGGTGCTCACACCGAGG 665 GCTCGATTTCACGCCCGTTGTTC 666 CGCCCAGGACCACCCTTAATCCCTCCACGG 666 AGCAGAGTGCTGCACCATTTCCACACCGCCGAACCTCTCCTTAA 666 CGCGACTAAGGTGCTCCACCTCGATCCTTAA 666 CGCGACTAAGGTGCTCCACCTCGATCCTTAA 666 CGCCCAGGACAAGGATACAACCGAGGC 666 AGCAGAGTGCCCGTTGTTC 666 AGCAGAGTGCCCGTTGTTC 666 AGCAGAGTGCCCTTGCCTCCCCCCCTCCCTCCCCCCCGAGCCCCTCACCCCCCCTCCCT		641	GTGCTTGACGAAGAGGCGAAATGT	ACATTTCGCCTCTTCGTCAAGCAC
644 GGCGAGTCTTGTGGGGACATGTGT ACACATGTCCCCACAAGACTCGCC 645 CCAAAGCGAAGCGAGCGTGTCTAT ATAGACACGCTCGCTTCGCT	15	642	CAGTCCGTGCGCTTCATGTCCTCA	TGAGGACATGAAGCGCACGGACTG
645 CCAAAGCGAAGCGAGCGTGTCTAT ATAGACACGCTCGCTTTCGCTTTGG 646 GCCGTAGGTTGCTCTTCACCGAAC GTTCGGTGAAGAGCAACCTACGGC 647 AAATCCGCGATGTGCCGTGAGGCT AGCCTCACGGCACATCGCGGATTT 648 GGCTTCGCACCCGTACCAATTTAG CTAAATTGGTACGGGTGCGAAGCC 649 TGTAGAGTCCCACGTAGCCGGCAT ATGCCGGCTACGTGGGACTCTACA 650 CACTAGTCTGGGGCAAGGTGCATT AATGCACCTTGCCCCAGACTAGTG 651 TGTACTCGGCAGGCGCAATAGATT AATCTATTGCGCCTGCGAGTACA 25 652 AACGGGTATCGGAAGCGTAAAAGC GCTTTTACGCTTCCGATACCCGTT 653 CGGACTGCCCGTTTGCAAGTTGAG CTCAACTTGCAAACGGGCAGTCCG 654 ATCGTTCAGCACTGGAGCCCGTAA TTACGGGTCCAGTGCTGAACGAT 655 ATGCATCGAACTAGTCGTGACGGC GCCGTCACGACTAGTTCGATGCAT 656 TTCCAGGCATTAAGGAGAGGGAGC GCCCCTCCTCTCTTAATGCCTGGAA 30 657 GTGCGACATCTACTCCACGATCCC GGGATCCTGTTAGGACGATGAG 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCCTGTGTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCAT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCCGTTGGATCCCTCCACGG 661 AAATTCTCGTTGGTGACGGC CCTCGGTTGGATTCCCTCCACGG 662 TTGCTCTTATCCTTGTCCTGGCG CCCCCAGGACAAGGATAAGACCAA 663 TTAAGGATCAGCGGGAGCTTCCAG TCGCACGACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGCG CCCCCAGGACAAGGATAAGACCAA 663 TTAAGGATCAGCGGGAGCTTCCAG TCGAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAACCGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGGCTCAT TAGGCCTCGACCAACGACCTTAGTCCCGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGACACTCGCT 40 667 TGGAGGTGAGAGACGACGTCACAA TTAGCCTCTCCACCCCCACCACCACCACCACCACCACCACCACC		643	TACGCGTAAGAGCCTACCCTCGCG	CGCGAGGGTAGGCTCTTACGCGTA
646 GCCGTAGGTTGCTCTTCACCGAAC GTTCGGTGAAGAGCAACCTACGGC 647 AAATCCGCGATGTGCCGTGAGGCT AGCCTCACGGCACATCGCGGATTT 648 GGCTTCGCACCCGTACCAATTTAG CTAAATTGGTACGGGTGCGAAGCC 649 TGTAGAGTCCCACGTAGCCGGCAT ATGCCGGCTACGTGGGACTCTACA 650 CACTAGTCTGGGGCAAGGTGCATT AATGCACCTTGCCCCAGACTACTG 651 TGTACTCGGCAGGCGCAATAGATT AATCTATTGCGCCTGCCGAGTACA 652 AACGGGTATCGGAAGCGTAAAAGC GCTTTTACGCTTCCGATACCCGTT 653 CGGACTGCCCGTTTGCAAGTTGAG CTCAACTTGCAACAGGGCAGTCCG 654 ATCGTTCAGCACTGGAGCCCGTAA TTACGGGTCCAGTGCAGGGCAGTCCG 655 ATGCATCGAACTAGTCGTGACGGC GCCGTCACGACCATGCAT 656 TTCCAGGCATTAAGGAGAGGGAGC GCCCCTCCTCTCCT		644	GGCGAGTCTTGTGGGGACATGTGT	ACACATGTCCCCACAAGACTCGCC
20 647 AAATCGGGATGTGCCGTGAGGCT AGCCTCACGGCACATCGCGGATTT 648 GGCTTCGCACCCGTACCAATTTAG CTAAATTGGTACGGGTGCGAAGCC 649 TGTAGAGTCCCACGTAGCCGGCAT ATGCCGGCTACGTGGGACTCTACA 650 CACTAGTCTGGGGCAAGGTGCATT AATGCACCTTGCCCCAGACTAGTG 651 TGTACTCGGCAGCGCGCAATAGATT AATCTATTGCGCCTGCCGAGTACA 652 AACGGGTATCGGAAGCGTAAAAGC GCTTTTACGCTTCCGATACCCGTT 653 CGGACTGCCCGTTTGCAAGTTGAG CTCAAACTGGCAAACGGGCAGTCCG 654 ATCGTTCAGCACTGGAGCCCGTAA TTACGGGCTCCAGTGCTGAACGAT 655 ATGCATCGAACTAGTCGTGACGC GCCGTCACGACTAGTTCGATGCAT 656 TTCCAGGCATTAAGGAGAGGAGC GCCGTCACGACTAGTTCGATGCAT 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGAGATGTCGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGACGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCACGG 661 AAATTCTCGTTGGTGACGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCCTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTCCAACGCACCTTAGTCGCG 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTCCAACGCACCTTTAGTCGCG 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTCCAACGCACCTTTGCT		645	CCAAAGCGAAGCGAGCGTGTCTAT	ATAGACACGCTCGCTTCGCTTTGG
648 GGCTTCGCACCCGTACCAATTTAG CTAAATTGGTACGGGTGCGAAGCC 649 TGTAGAGTCCCACGTAGCCGGCAT ATGCCGGCTACGTGGGACTCTACA 650 CACTAGTCTGGGGCAAGGTGCATT AATGCACCTTGCCCCAGACTAGTG 651 TGTACTCGGCAGGCGCAATAGATT AATCTATTGCGCCTGCCGAGTACA 652 AACGGGTATCGGAAGCGTAAAAGC GCTTTTACGCTTCCGATACCCGTT 653 CGGACTGCCCGTTTGCAAGTTGAG CTCAACTTGCAAACGGGCAGTCCG 654 ATCGTTCAGCACTGGAGCCCGTAA TTACGGGCTCCAGTGCAACGAT 655 ATGCATCGAACTAGTCGTGACGGC GCCGTCACGACTAGTCGATACAT 656 TTCCAGGCATTAAGGAGAGGGAGC GCCCCTCTCCTTAATGCCTGGAA 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGGAGAGTGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCCGGTTGGATTCCCTCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGCCG CGCCCAAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGACTTGCAGCCGCGAAATTCAACGGGGGAGCAACGAACACGAGAATTT 665 GCTCGATTTCACGCCCGTTGTTC GAACAACGGCCCTTAAATCGAGC 666 AGCAGAGTGCGTTGCAAGGCTAA TTAGCCTCTGCAACCCTTAGTCCCCCCGCGGAGCAACGGACAATCGAGC 667 TGGAGGTGAGGACAACGCACACTAA TTAGCCCTCTCCAACGCCCGCCGAACTCCCCCCCCCC		646	GCCGTAGGTTGCTCTTCACCGAAC	GTTCGGTGAAGAGCAACCTACGGC
649 TGTAGAGTCCCACGTAGCCGGCAT ATGCCGGCTACGTGGGACTCTACA 650 CACTAGTCTGGGGCAAGGTGCATT AATGCACCTTGCCCCAGACTAGTG 651 TGTACTCGGCAGGCGCAATAGATT AATCTATTGCGCCTGCCGAGTACA 652 AACGGGTATCGGAAGCGTAAAAGC GCTTTTACGCTTCCGATACCCGTT 653 CGGACTGCCCGTTTGCAAGTTGAG CTCAACTTGCAAACGGGCAGTCCG 654 ATCGTTCAGCACTGGAGCCCGTAA TTACGGGCTCCAGTGCTGAACGAT 655 ATGCATCGAACTAGTCGTGACGC GCCGTCACGACTAGTTCGATGCAT 656 TTCCAGGCATTAAGGAGAGGGAGC GCTCCCTCTCTTAATGCCTGGAA 30 657 GTGCGACATCTCCCACGATCCC GGGATCGTGAGAGTAGAGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGCCTCTCGTGTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGCTAA TTAGCCTCTGCAACCGAGC 667 TGGAGGTGAGGACGACTTAA TTAGCCTCTGCAACCGACCACCTCTGCT 40 667 TGGAGGTGAGGACGACGTCACTA TAGTGCACGTCCTCCACCTCCACCACCACCACCACCACCCAC	20	647	AAATCCGCGATGTGCCGTGAGGCT	AGCCTCACGGCACATCGCGGATTT
650 CACTAGTCTGGGGCAAGGTGCATT AATGCACCTTGCCCCAGACTAGTG 651 TGTACTCGGCAGGCGCAATAGATT AATCTATTGCGCCTGCCGAGTACA 25 652 AACGGGTATCGGAAGCGTAAAAGC GCTTTTACGCTTCCGATACCCGTT 653 CGGACTGCCCGTTTGCAAGTTGAG CTCAACTTGCAAACGGGCAGTCCG 654 ATCGTTCAGCACTGGAGCCCGTAA TTACGGGCTCCAGTGCTGAACGAT 655 ATGCATCGAACTAGTCGTGACGGC GCCGTCACGACTAGTCGATCACT 656 TTCCAGGCATTAAGGAGAGGGAGC GCCCTCCCTCTCCTTAATGCCTGGAA 30 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGGAGTAGAGTGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGCTAA TTAGCCTCTGCAACGCACTTCGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGCCCTCACCCACCACGACGACTCTCCCCCCCC		648	GGCTTCGCACCCGTACCAATTTAG	CTAAATTGGTACGGGTGCGAAGCC
25 651 TGTACTCGGCAGGCGCAATAGATT AATCTATTGCGCCTGCCGAGTACA 652 AACGGGTATCGGAAGCGTAAAAGC GCTTTTACGCTTCCGATACCCGTT 653 CGGACTGCCCGTTTGCAAGTTGAG CTCAACTTGCAAACGGGCAGTCCG 654 ATCGTTCAGCACTGGAGCCCGTAA TTACGGGCTCCAGTGCTGAACGAT 655 ATGCATCGAACTAGTCGTGACGGC GCCGTCACGACTAGTTCGATGCAT 656 TTCCAGGCATTAAGGAGAGGGAGC GCTCCCTCTCTTAATGCCTGGAA 30 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGGAGTAGATGTCGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGCTAA TTAGCCTCTGCACCACCTTAGTCGCG 667 TGGAGGTGAGGACGACGTCACTA TTAGCCTCTCCACCGCCTGAAATCGAGC AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCACCACCTCGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCACCTCCAC		649	TGTAGAGTCCCACGTAGCCGGCAT	ATGCCGGCTACGTGGGACTCTACA
25 652 AACGGGTATCGGAAGCGTAAAAGC GCTTTTACGCTTCCGATACCCGTT 653 CGGACTGCCCGTTTGCAAGTTGAG CTCAACTTGCAAACGGGCAGTCCG 654 ATCGTTCAGCACTGGAGCCCGTAA TTACGGGCTCCAGTGCTGAACGAT 655 ATGCATCGAACTAGTCGTGACGGC GCCGTCACGACTAGTTCGATGCAT 656 TTCCAGGCATTAAGGAGAGGGAGC GCTCCCTCTCTTAATGCCTGGAA 30 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGGAGTAGATGTCGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTCACTA TAGTGCACGTCCTCACCTCCA		650	CACTAGTCTGGGGCAAGGTGCATT	AATGCACCTTGCCCCAGACTAGTG
653 CGGACTGCCCGTTTGCAAGTTGAG CTCAACTTGCAAACGGGCAGTCCG 654 ATCGTTCAGCACTGGAGCCCGTAA TTACGGGCTCCAGTGCTGAACGAT 655 ATGCATCGAACTAGTCGTGACGGC GCCGTCACGACTAGTTCGATGCAT 656 TTCCAGGCATTAAGGAGAGGGAGC GCCCTCCCTCTCCTTAATGCCTGGAA 30 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGGAGTAGATGTCGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCACCTCCA		651	TGTACTCGGCAGGCGCAATAGATT	AATCTATTGCGCCTGCCGAGTACA
ATCGTTCAGCACTGGAGCCCGTAA TTACGGGCTCCAGTGCTGAACGAT 655 ATGCATCGAACTAGTCGTGACGC GCCGTCACGACTAGTTCGATGCAT 656 TTCCAGGCATTAAGGAGAGGGAGC GCTCCCTCTCCTTAATGCCTGGAA 30 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGGAGTAGATGTCGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCACCTCCA	25	652	AACGGGTATCGGAAGCGTAAAAGC	GCTTTTACGCTTCCGATACCCGTT
ATGCATCGAACTAGTCGTGACGGC GCCGTCACGACTAGTTCGATGCAT 656 TTCCAGGCATTAAGGAGAGGGAGC GCTCCCTCTCTTAATGCCTGGAA  30 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGGAGTAGATGTCGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCACCTCCA		653	CGGACTGCCCGTTTGCAAGTTGAG	CTCAACTTGCAAACGGGCAGTCCG
30 656 TTCCAGGCATTAAGGAGAGGGAGC GCTCCCTCTCTTAATGCCTGGAA 30 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGGAGTAGATGTCGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCACCTCCA		654	ATCGTTCAGCACTGGAGCCCGTAA	TTACGGGCTCCAGTGCTGAACGAT
30 657 GTGCGACATCTACTCCACGATCCC GGGATCGTGGAGTAGATGTCGCAC 658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCACCTCCA		655	ATGCATCGAACTAGTCGTGACGGC	GCCGTCACGACTAGTTCGATGCAT
658 CTCATCGTCCTAACACGAGAGCCC GGGCTCTCGTGTTAGGACGATGAG 659 AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT 660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCACCTCCA		656	TTCCAGGCATTAAGGAGAGGGAGC	GCTCCCTCCCTTAATGCCTGGAA
AATGGCACTTCGGCGGTGATGCAA TTGCATCACCGCCGAAGTGCCATT  660 CCGTGGGAGGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCCACGG  661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT  35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA  663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA  664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG  665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC  666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT  40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCCA	30	657	GTGCGACATCTACTCCACGATCCC	GGGATCGTGGAGTAGATGTCGCAC
660 CCGTGGGAGGAATCCAACCGAGG CCTCGGTTGGATTCCCTCCACGG 661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT 35 662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCCA		658	CTCATCGTCCTAACACGAGAGCCC	GGGCTCTCGTGTTAGGACGATGAG
661 AAATTCTCGTTGGTGACGGCTCAT ATGAGCCGTCACCAACGAGAATTT  662 TTGCTCTTATCCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA  663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA  664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG  665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC  666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT  40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCCA		659	AATGGCACTTCGGCGGTGATGCAA	TTGCATCACCGCCGAAGTGCCATT
35 662 TTGCTCTTGTCCTGGGCG CGCCCAGGACAAGGATAAGAGCAA 663 TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA 664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCCTCCCA		660	CCGTGGGAGGGAATCCAACCGAGG	CCTCGGTTGGATTCCCTCCCACGG
TTAAGGATCAGGCGGAGCTTGCAG CTGCAAGCTCCGCCTGATCCTTAA  664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG  665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC  666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT  40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCGTCCTCCA		661	AAATTCTCGTTGGTGACGGCTCAT	ATGAGCCGTCACCAACGAGAATTT
664 CGCGACTAAGGTGCTGCAACTCGA TCGAGTTGCAGCACCTTAGTCGCG 665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCGTCCTCACCTCCA	35	662	TTGCTCTTATCCTTGTCCTGGGCG	CGCCCAGGACAAGGATAAGAGCAA
665 GCTCGATTTCACGGCCCGTTGTTC GAACAACGGGCCGTGAAATCGAGC 666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCGTCCTCACCTCCA		663	TTAAGGATCAGGCGGAGCTTGCAG	CTGCAAGCTCCGCCTGATCCTTAA
666 AGCAGAGTGCGTTGCAGAGGCTAA TTAGCCTCTGCAACGCACTCTGCT 40 667 TGGAGGTGAGGACGACGTGCACTA TAGTGCACGTCGTCCTCACCTCCA		664	CGCGACTAAGGTGCTGCAACTCGA	TCGAGTTGCAGCACCTTAGTCGCG
40 667 TGGAGGTGAGGACGTGCACTA TAGTGCACGTCGTCCTCACCTCCA		665	GCTCGATTTCACGGCCCGTTGTTC	GAACAACGGGCCGTGAAATCGAGC
		666	AGCAGAGTGCGTTGCAGAGGCTAA	TTAGCCTCTGCAACGCACTCTGCT
668 AACCGTTTAGGGTACATTCGCGGT ACCGCGAATGTACCCTAAACGGTT	40	667	TGGAGGTGAGGACGTGCACTA	TAGTGCACGTCGTCCTCACCTCCA
		668	AACCGTTTAGGGTACATTCGCGGT	ACCGCGAATGTACCCTAAACGGTT

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	669	_	TATGATCGCTCGGCTCACAGTTTG	CAAACTGTGAGCCGAGCGATCATA
	670		GACTTTTTGCGGAAACGTCATGGT	ACCATGACGTTTCCGCAAAAAGTC
	671		TGTCGGTTATTCCACCTGCAAGGA	TCCTTGCAGGTGGAATAACCGACA
	672		CTATGGTTTGCACTGCGCCGTCGA	TCGACGGCGCAGTGCAAACCATAG
5	673		AGCAGGGAAATTCAATCGTTCGCA	TGCGAACGATTGAATTTCCCTGCT
	674		CCTAACCGAGCGCTTAGCATTTCC	GGAAATGCTAAGCGCTCGGTTAGG
	675		CCCGACCCTAACTCGCATTGAATA	TATTCAATGCGAGTTAGGGTCGGG
	676		TTGCTTAATGGTGACGCCACGGAT	ATCCGTGGCGTCACCATTAAGCAA
	677		GATGCTCGCCGTGTTTAGTTCACG	CGTGAACTAAACACGGCGAGCATC
10	678		TCGGATGACGAGTTTCCATGACGG	CCGTCATGGAAACTCGTCATCCGA
	679		ATGCGGTCTACTTTCTCGATCGGG	CCCGATCGAGAAAGTAGACCGCAT
	680		TTGCGAGGCTAAGCACACGGTAAA	TTTACCGTGTGCTTAGCCTCGCAA
	681		AACTTAATTACCGCCTCTGGCGCC	GGCGCCAGAGGCGGTAATTAAGTT
	682		GTGACCGCGAACTTGTTCCGACAG	CTGTCGGAACAAGTTCGCGGTCAC
15	683		TGCGGATTACCGATTCGCTCTTAA	TTAAGAGCGAATCGGTAATCCGCA
	684		TGATAGGGGGCCACGTTGATCAGA	TCTGATCAACGTGGCCCCCTATCA
	685		TCGCTCCGTAGCGATTCATCGTAG	CTACGATGAATCGCTACGGAGCGA
	686		TGTCAGCTGGTAGCCTCCGTTTGA	TCAAACGGAGGCTACCAGCTGACA
	687		AGCGTCGCATGACGCTTACGGCAC	GTGCCGTAAGCGTCATGCGACGCT
20 '		14	AGACGCACCGCAACAGGCTGTCAA	TTGACAGCCTGTTGCGGTGCGTCT
		15	CGTGTÁGGGGTCCCGTGCTGTCAA	TTGACAGCACGGGACCCCTACACG
	690		GTCGCATTCTGCACTGGCTTCGCC	GGCGAAGCCAGTGCAGAATGCGAC
	691		TGATTAGGTGCGGTCCCGTAGTCC	GGACTACGGGACCGCACCTAATCA
	692		AAGGGACCTTGGGTGACGGCGAGA	TCTCGCCGTCACCCAAGGTCCCTT
25	693		TCAAATGGCCACCGCGTGTCATTC	GAATGACACGCGGTGGCCATTTGA
	694		CTCCGACGACCAATAAATAGCCGC	GCGGCTATTTATTGGTCGTCGGAG
	695		GGCTATTCCCGTAGAGAGCGTCCA	TGGACGCTCTCTACGGGAATAGCC
	696		TGGATAACCTCTCGGTCCATCCAC	GTGGATGGACCGAGAGGTTATCCA
	697		GACCGCTGTACGGGAGTGTGCCTT	AAGGCACACTCCCGTACAGCGGTC
30	698		GCCACAGAGTTTTAGCAGGGACCC	GGGTCCCTGCTAAAACTCTGTGGC
	699		CCCACGCTTTCCGACCACTGACCT	AGGTCAGTGGTCGGAAAGCGTGGG
	700		CATTGACACAATGCGGGGACTGAT	ATCAGTCCCCGCATTGTGTCAATG
	701		AGCCACTCGACAGGGTTCCAAAGC	GCTTTGGAACCCTGTCGAGTGGCT
	702		CAGGATGAGCAAAGCGACTCTCCA	TGGAGAGTCGCTTTGCTCATCCTG
35	703		CAAGGTATGGTCTGGGGCCTAAGC	GCTTAGGCCCCAGACCATACCTTG
•	704		GGTGTTCGGCCTAAACTCTTTCGG	CCGAAAGAGTTTAGGCCGAACACC
	705		TTTAGTCGGACCCTGTGGCAATTC	GAATTGCCACAGGGTCCGACTAAA
	706		CACACGTTTCCGACCAGCCTGAAC	GTTCAGGCTGGTCGGAAACGTGTG
[	707		CTGGACGAACTGGCTTCCTCGTAC	GTACGAGGAAGCCAGTTCGTCCAG
40	708		TTCACAATCCGCCGAAAACTGACC	GGTCAGTTTTCGGCGGATTGTGAA
	709		AACAGGATATCCGCGATCACGACA	TGTCGTGATCGCGGATATCCTGTT

	710	TACGTCGGATCCATTGCGCCGAGT	ACTCGGCGCAATGGATCCGACGTA
	711	CATGGATCTCTCGGTTTGATCGCC	GGCGATCAAACCGAGAGATCCATG
	712	AGCCAGGCGCGTATATACGCTCGG	CCGAGCGTATATACGCGCCTGGCT
	713	ATTTGGCACGTGTCGTGCCATGTT	AACATGGCACGACACGTGCCAAAT
5	714	CCGCGTTGCACCACTTTGAGGTGC	GCACCTCAAAGTGGTGCAACGCGG
	715	TTGGACGTGACAAGCATGGCGCTC	GAGCGCCATGCTTGTCACGTCCAA
	716	CTGAATCGCGCAAGTAAATGGGGG	CCCCATTTACTTGCGCGATTCAG
	717	GATAAGGTCCACCAGATTGCGCGC	GCGCGCAATCTGGTGGACCTTATC
	718	CTAACAATTGCCAACCGGGACGGC	GCCGTCCCGGTTGGCAATTGTTAG
10	719	GGTAACCTGGGTGCTTGCAGGTTA	TAACCTGCAAGCACCCAGGTTACC
	720	ATCGGAGCCACCATTCGCATTGGG	CCCAATGCGAATGGTGGCTCCGAT
	721	GTGAACTGGCTTGCCCCAGGATTA	TAATCCTGGGGCAAGCCAGTTCAC
	722	AGGCGATAGCATGGTCCCATATGA	TCATATGGGACCATGCTATCGCCT
	723	AACGGTATCGTGGCTAATGCACGA	TCGTGCATTAGCCACGATACCGTT
15	724	AGTAGTGGTCCTCCAGATCGGCAA	TTGCCGATCTGGAGGACCACTACT
	725	CCGTTGAATTGGACGGGAGGTTAG	CTAACCTCCCGTCCAATTCAACGG
	726	GCATAAGTGCGGCATCGCGAAGGG	CCCTTCGCGATGCCGCACTTATGC
•	727	CGACAAGATGCAGCTGCTACATGC	GCATGTAGCAGCTGCATCTTGTCG
	728	TCGCAGTGATTCCCGACCGATAAG	CTTATCGGTCGGGAATCACTGCGA
20	729	CAAGGCGAGTCCACTCGAGGGGAC	GTCCCCTCGAGTGGACTCGCCTTG
	730	GCAACTTGCACGGCATAAGTGGCC	GGCCACTTATGCCGTGCAAGTTGC
	731	TCCGAGCTTGACGTTCGCGACGTC	GACGTCGCGAACGTCAAGCTCGGA
	732	AGCGCTGGGCTGTGCCATCTC	GAGATGGCAGCACAGCCCAGCGCT
	733	TTCATGTCGCTGAGTAACCCTCGC	GCGAGGGTTACTCAGCGACATGAA
25	734	CGAACCGCTAATGCCCATTGTCAG	CTGACAATGGGCATTAGCGGTTCG
	735	CACGGAAGGTGGGACAAATCGCCG	CGGCGATTTGTCCCACCTTCCGTG
	736	CACAGATGGAGACAAACGCGCCTT	AAGGCGCGTTTGTCTCCATCTGTG
	737	TTTTCGCAACTCGCTCCATAACCC	GGGTTATGGAGCGAGTTGCGAAAA
	· 738	ACGTTACGTTTCCGGCGCCTCTAA	TTAGAGGCGCCGGAAACGTAACGT
30	739	TATCGGATTGCGTGGGTTTCAATC	GATTGAAACCCACGCAATCCGATA
	740	CTTCCACAATTGTCTGCGACGCAC	GTGCGTCGCAGACAATTGTGGAAG
	741	TGCACAAAGGTATGGCTGTCCGGC	GCCGGACAGCCATACCTTTGTGCA
	742	TCCGATGCCAGTCCCATCTTAAGA	TCTTAAGATGGGACTGGCATCGGA
	743	CTGAAACCGTGCGAATCGAGGTGA	TCACCTCGATTCGCACGGTTTCAG
35	744	CGGTGTTCCGCGTGTCGAAAAAAT	ATTTTTCGACACGCGGAACACCG
	745	TCTAGCAGGCCTTTTGAATCGCCA	TGGCGATTCAAAAGGCCTGCTAGA
	746	GAGTCACCTCTGAGACGGACGCCA	TGGCGTCCGTCTCAGAGGTGACTC
	747	TCTTCTGTCATCCTGCAGCAGCAT	ATGCTGCTGCAGGATGACAGAAGA
	748	GCGGATGAAACCTGAAAGGGGCCT	AGGCCCCTTTCAGGTTTCATCCGC
40	749	GGGCCCCAAACTGGTATCAAGCC	GGCTTGATACCAGTTTGGGGCCCC
	750	GCATTGGCTTCGGATTCTCCTACA	TGTAGGAGAATCCGAAGCCAATGC

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751	AGGCGGCCCAACTGTGAGGTCTTG	CAAGACCTCACAGTTGGGCCGCCT
752	ACACCATGTGCTCCGCGCTGCAGT	ACTGCAGCGCGGAGCACATGGTGT
753	ACGATGAACATGAATCGGGAGTCG	CGACTCCCGATTCATGTTCATCGT
754	CTGCATCCCTGTAGCAGCGCTCCG	CGGAGCGCTGCTACAGGGATGCAG
755	GTGCCGTATTTCGACCTGTGCGTT	AACGCACAGGTCGAAATACGGCAC
756	GCAGTGCGCACTTCAGTTCAAAAG	CTTTTGAACTGAAGTGCGCACTGC
757	GCGATTTTAAGCGATGCCTTGACG	CGTCAAGGCATCGCTTAAAATCGC
758	TAGGTGACCTAGGCTTGCTTGCGG	CCGCAAGCAAGCCTAGGTCACCTA
759	CTGGATACCTTGCCTGTGCGGCGC	GCGCCGCACAGGCAAGGTATCCAG
760	CCCCTTACGGCTCGTCGTCTATGC	GCATAGACGACGAGCCGTAAGGGG
761	GCGCTTGCCCGATGCGATGCATTA	TAATGCATCGCATCGGGCAAGCGC
762	TTTCTGTAAGCGGCCTGGGGTTCA	TGAACCCCAGGCCGCTTACAGAAA
763	GGCTGAGGTGAGCGGTAAGGATGA	TCATCCTTACCGCTCACCTCAGCC
764	TCTTGGCCTCCCCGATCTAATTTG	CAAATTAGATCGGGGAGGCCAAGA
765	GGAGGTAACGCCGTGTACGTAGGA	TCCTACGTACACGGCGTTACCTCC
766	GTAATCCATTTGTGGCTGCGTCAA	TTGACGCAGCCACAAATGGATTAC
767	CAAACCCATTCCAGCAGACGCCTG	CAGGCGTCTGCTGGAATGGGTTTG
768	TAGGAGGAATTTGGCATGCGGGCG	CGCCGCATGCCAAATTCCTCCTA
769	ATAGGTAGGATGTGCCCGGCGTTG	CAACGCCGGGCACATCCTACCTAT
770	GCAAGTGCTTAGCTCGTCAGCCTC	GAGGCTGACGAGCTAAGCACTTGC
771	CTGGCTGTGTCGCATCTCGTTAAC	GTTAACGAGATGCGACACAGCCAG
772	CTAACGTCGTCTCGCGCAATCACT	AGTGATTGCGCGAGACGACGTTAG
773	TTTTCATAAACGTTGTCCCCGAGC	GCTCGGGGACAACGTTTATGAAAA
774	AGCAGGAGGACGAACCTCCGCTCC	GGAGCGGAGGTTCGTCCTCCTGCT
775	TTCAAGCACCATCGTGCAATCCAA	TTGGATTGCACGATGGTGCTTGAA
776	AGCGTCGCCAGTGATCGCTAGTGG	CCACTAGCGATCACTGGCGACGCT
777	TACATTCCCTGCCTCCGTGGGCTT	AAGCCCACGGAGGCAGGGAATGTA
778	CGCTTCGCGTATTCAGTAGCGGTT	AACCGCTACTGAATACGCGAAGCG
779	TCGGACGCGTCGACACTCATTATA	TATAATGAGTGTCGACGCGTCCGA
780	TCTGAGCAGGCCAGCTCCAGCT	AGCTGGAGCGCTGGCCTGAGA
781	TTGAATTGCCAAGCCCTGAAAGCC	GGCTTTCAGGGCTTGGCAATTCAA
782	AGTTTTCGCCTTGATGCGTCGGTG	CACCGACGCATCAAGGCGAAAACT
783	GTTTCATAGGCCACGCGTGCTAAA	TTTAGCACGCGTGGCCTATGAAAC
16	CATCGCTGCAAGTACCGCACTCAA	TTGAGTGCGGTACTTGCAGCGATG

TABLE 4

Seq. ID No.	Decoder Sequence (5'-3') + 5' T	Probe Sequence (5'-3') + 5' T
17	TTTCGCCGTCGTGTAGGCTTTTCAA	TTTGAAAAGCCTACACGACGGCGAA
18	TGTTCCCAGTGAAGCTGCGATCTGG	TCCAGATCGCAGCTTCACTGGGAAC
19	TTACTTGGCATGGAATCCCTTACGC	TGCGTAAGGGATTCCATGCCAAGTA
20	TACTAGCATATTTCAGGGCACCGGC	TGCCGGTGCCCTGAAATATGCTAGT
21	TGAACGGTCAATGAACCCGCTGTGA	TTCACAGCGGGTTCATTGACCGTTC
22	TGCGGCCTTGGTTCAATATGAATCG	TCGATTCATATTGAACCAAGGCCGC
23	TGATCGTTAGAGGGACCTTGCCCGA	TTCGGGCAAGGTCCCTCTAACGATC
24	TTGGACCTAGTCCGGCAGTGACGAA	TTTCGTCACTGCCGGACTAGGTCCA
25	TATAAACTACCCAGGACGGGCGGAA	TTTCCGCCCGTCCTGGGTAGTTTAT
26	TCATCGGTTCGCGCCAATCCAGATA	TTATCTGGATTGGCGCGAACCGATG
27	TGTCGGGCATAGAGCCGACCACCCT	TAGGGTGGTCGGCTCTATGCCCGAG
28	TCTTGGGTCATGATTCACCGTGCTA	TTAGCACGGTGAATCATGACCCAAG
29	TTGCCTAACGTGCTAATCAGCAGCG	TCGCTGCTGATTAGCACGTTAGGCA
30	TCGCATGTTGGAGCATATGCCCTGA	TTCAGGGCATATGCTCCAACATGCG
31	TAGCCACTGCATCAGTGCTGTTCAA	TTTGAACAGCACTGATGCAGTGGCT
32	TGGTTGTTTTGAGGCGTCCCACACT	TAGTGTGGGACGCCTCAAAACAACC
33	TTCGACCAAGAGCAAGGGCGGACCA	TTGGTCCGCCCTTGCTCTTGGTCGA
34	TGACATCGCTATTGCGCATGGATCA	TTGATCCATGCGCAATAGCGATGTC
35	TGAAATACGAAGTCTGCGGGAGTCG	TCGACTCCCGCAGACTTCGTATTTC
36	TTGTCATGAATGATTGATCGCGCGA	TTCGCGCGATCAATCATTCATGACA
37	TATATCGGGATTCGTTCCCGGTGAA	TTTCACCGGGAACGAATCCCGATAT
38	TGCGAGCGTACCGAAGGGCCTAGAA	TTTCTAGGCCCTTCGGTACGCTCGC
39	TTTACCGGCAGCGGACTTCCGAATT	TAATTCGGAAGTCCGCTGCCGGTAA
40	TGTAATCGAGAGCTGCGCGCCGTCT	TAGACGGCGCGCAGCTCTCGATTAC
41	TCCTGTTAGCGTAGGCGAGTCGATC	TGATCGACTCGCCTACGCTAACAGG
42	TTAGCGGACCGGCAGAATGAGTTCC	TGGAACTCATTCTGCCGGTCCGCTA
43	TGGTACATGCACTACGCGCACTCGG	TCCGAGTGCGCGTAGTGCATGTACC
44	TAATTCATCTCGGACTCCCGCGGTA	TTACCGCGGGAGTCCGAGATGAATT
45	TGCCAAATCTGGATTGGCAGGAATG	TCATTCCTGCCAATCCAGATTTGGC
46	TTGCATTTTCGGTTGAGGCACATCC	TGGATGTGCCTCAACCGAAAATGCA
47	TCCGCTCAATTCACCATGCTTCGCT	TAGCGAAGCATGGTGAATTGAGCGG
48	TCTCGGAAAGGTGCAACTTTGGTGT	TACACCAAAGTTGCACCTTTCCGAG
49	TAATTCGACCAGCAGAACGTCCCAT	TATGGGACGTTCTGCTGGTCGAATT
50	TGCCAGAGTCTCAACCTCACGGGAT	TATCCCGTGAGGTTGAGACTCTGGC
51	TCCAACAACTGGAACGGGAACCCGC	TGCGGGTTCCCGTTCCAGTTGTTGG
52	TGAGAACTGATCGCTGAGGGGCATG	TCATGCCCCTCAGCGATCAGTTCTC
53	TGGCACACTAGACTTGTGGCACCGA	TTCGGTGCCACAAGTCTAGTGTGCC

	54	TTCACATCCAAATATGGTCCGCGAA	TTTCGCGGACCATATTTGGATGTGA
	55	TGTCTGCCGGTGTGACCGCTTCATT	TAATGAAGCGGTCACACCGGCAGAC
	56	TCATCGCAGAGCATAAACACCCTCA	TTGAGGGTGTTTATGCTCTGCGATG
	57	TGTTGGTATCTATGGCAGAGGCGGA	TTCCGCCTCTGCCATAGATACCAAC
5	58	TACGAGGTGCCGCTGAGGTTCCATT	TAATGGAACCTCAGCGGCACCTCGT
	59	TGGAATGAGTGGACCCAGGCACATT	TAATGTGCCTGGGTCCACTCATTCC
	60	TTGTCAATATGCGTCCGTGTCGTCT	TAGACGACACGGACGCATATTGACA
	61	TTGATGAGCCTCAGGGTACGAGGCA	TTGCCTCGTACCCTGAGGCTCATCA
	62	TCACCGCGGTGTTCCTACAGAATGA	TTCATTCTGTAGGAACACCGCGGTG
10	63	TTTGTTGCCAATGGTGTCCGCTCGG	TCCGAGCGGACACCATTGGCAACAA
	64	TTTAACCTGCGTCTGCCCCTTTCCT	TAGGAAAGGGGCAGACGCAGGTTAA
	65	TAGGCGCGTTCCTGCCTTAGTGACG	TCGTCACTAAGGCAGGAACGCGCCT
	66	TTAGGGCGATGGCACGAAGCTTCAA	TTTGAAGCTTCGTGCCATCGCCCTA
	67	TTGCATAGAGCCAAAGTCGGCGATG	TCATCGCCGACTTTGGCTCTATGCA
15	68	TTTGAGAGGCAGGTGGCCACACGGA	TTCCGTGTGGCCACCTGCCTCTCAA
	69	TTCCGCATTGTGAGAAAAAACGAGC	TGCTCGTTTTTTCTCACAATGCGGA
	70	TGGCGGTTTCCGTAGCTATAGGTGC	TGCACCTATAGCTACGGAAACCGCC
	71	TGGTGAAAATTTCGTAGCCACGGGC	TGCCCGTGGCTACGAAATTTTCACC
	72	TCCGACGGAGGATGAAGACAATCAC	TGTGATTGTCTTCATCCTCCGTCGG
20	73	TCCAGTTTGGCCCAATTCGCCAAAA	TTTTTGGCGAATTGGGCCAAACTGG
	74	TGGATCTATTAGGCCGTGCGCACAG	TCTGTGCGCACGGCCTAATAGATCC
	75	TCGGATGTCACCGTTTGGACTTTCA	TTGAAAGTCCAAACGGTGACATCCG
	76	TATCGCAAATCCTGCTCGTCCCTAA	TTTAGGGACGAGCAGGATTTGCGAT
	77	TCAGGGCATGCAATAATCGAGGTTC	TGAACCTCGATTATTGCATGCCCTG
25	78	TCATGCGTTGATATATGGGCCCAAG	TCTTGGGCCCATATATCAACGCATG
	79	TCAGCTGCAGCTTGTGACCAACCAC	TGTGGTTGGTCACAAGCTGCAGCTG
	80	TTTGTATGTCTGCCGACCGGCGACC	TGGTCGCCGGTCGGCAGACATACAA
	81	TGATGGCGCCCGTTGATAGGTATGG	TCCATACCTATCAACGGGCGCCATC
	82	TATGAGAATCGCCGGCAATCTGCTA	TTAGCAGATTGCCGGCGATTCTCAT
30	83	TATTTGCACTGACCGCAGGCTCGTG	TCACGAGCCTGCGGTCAGTGCAAAT
	84	TCAGGGAGAACGGTTAAGTTCCCGT	TACGGGAACTTAACCGTTCTCCCTG
	85	TAGGCCGGCGATCGAGGAGTTTGGT	TACCAAACTCCTCGATCGCCGGCCT
	86	TACACGGTGGTCTCTGATAGCGACC	TGGTCGCTATCAGAGACCACCGTGT
	87	TGTGCAACGCCGAGGACTTCCATCA	TTGATGGAAGTCCTCGGCGTTGCAC
35 .	88	TTCGGTGCCTGATAGCCATTCCGAT	TATCGGAATGGCTATCAGGCACCGA
	89	TTGAAATACCACACAGCCAATTGGC	TGCCAATTGGCTGTGTGGTATTTCA
i	90	TGCATCGTGTACATGACTGCCGCGA	TTCGCGGCAGTCATGTACACGATGC
	91	TCAGTGTTCTAACGGCGCGCGTGAA	TTTCACGCGCGCCGTTAGAACACTG
	92	TCGCTTGCAACGTTGCACCTACTCT	TAGAGTAGGTGCAACGTTGCAAGCG
40	93	TCGAAAAACTAGTGGGCTCGCCGCG	TCGCGGCGAGCCCACTAGTTTTCG
	94	TCTTTCAGGGGAACTGCCGGAGTCG	TCGACTCCGGCAGTTCCCCTGAAAG

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	95	TTTGTGGCCTTCTTGTAAAGGCACG	TCGTGCCTTTACAAGAAGGCCACAA
	96	TTCCACGAACGGCGACCCGTTGTCT	TAGACAACGGGTCGCCGTTCGTGGA
:	97	TCGACCTTGCACGAAACCTAACGAG	TCTCGTTAGGTTTCGTGCAAGGTCG
	98	TGTGCAGCTTCACGAGCCAGCCTGA	TTCAGGCTGGCTCGTGAAGCTGCAC
,5	99	TCGCTTTCGTGCGAATAGACGATGA	TTCATCGTCTATTCGCACGAAAGCG
	100	TTGCGCTTACAGGCTCCTAGTGGTC	TGACCACTAGGAGCCTGTAAGCGCA
	101	TCACGCGCTTAGTCGCGATCGCATA	TTATGCGATCGCGACTAAGCGCGTG
	102	TCGGAGGGAGGGAGCTAGCCTTCGA	TTCGAAGGCTAGCTCCCTCCG
	103	TGCATCCGGCCTGTTGATGACGCCT	TAGGCGTCATCAACAGGCCGGATGC
10	104	TAGGCCAATCGATCTTATTGCCGAG	TCTCGGCAATAAGATCGATTGGCCT
	105	TCCTTCCAATGATTGCATACGCCCA	TTGGGCGTATGCAATCATTGGAAGG
	106	TAACACTTGATCAGGCGGGTCGTCT	TAGACGACCCGCCTGATCAAGTGTT
	107	TTGGAATCAAGGCCGTAAAGGACAG	TCTGTCCTTTACGGCCTTGATTCCA
	108	TGCTCCCGTAACCTGTCCACCAGTG	TCACTGGTGGACAGGTTACGGGAGC
15	109	TAGTGGTGAATGGCCGCTACCCTGA	TTCAGGGTAGCGGCCATTCACCACT
	110	TTGTTGAAGCGAGCTAAAACGGCCA	TTGGCCGTTTTAGCTCGCTTCAACA
	111	TCAGCGCTCCAGAATTGACAGCAAT	TATTGCTGTCAATTCTGGAGCGCTG
		2 TTTCGAAGCGCACGTCCCTTTTCAA	TTTGAAAAGGGACGTGCGCTTCGAA
		TAACGCGTGGGGAATGGGACATCAA	TTTGATGTCCCATTCCCCACGCGTT
20	114	TCACGAGATACCGGCGTAAGGGTGG	TCCACCCTTACGCCGGTATCTCGTG
	115	TCTACGGCAAACGTGTGGAATGGGT	TACCCATTCCACACGTTTGCCGTAG
	116	TGTAGGGCGATGACGGCGAACTAC	TGTAGTTCGCCCGTCATCGCCCTAC
	117	TAATCGACCTCCGCACACATTCGCA	TTGCGAATGTGTGCGGAGGTCGATT
	118	TGAGTCAGCATGGCGGCGGAGATTC	TGAATCTCCGCCGCCATGCTGACTC
25	119	TAGATAAAGACGCTGGCAACACGGG	TCCCGTGTTGCCAGCGTCTTTATCT
	120	TGGTACCTCAACGCGAACCACTTGT	TACAAGTGGTTCGCGTTGAGGTACC
	121	TAAGCGATGGCTACCCAAGAGCGAT	TATCGCTCTTGGGTAGCCATCGCTT
	122	TAGAGCTTATGCAGAACCAGGCGCC	TGGCGCCTGGTTCTGCATAAGCTCT
	123	TATCGGTCTCACGCAGGGTTGGATA	TTATCCAACCCTGCGTGAGACCGAT
30	124	TTAGGTTGCCCGCCAGAAGAAACAT	TATGTTTCTTCTGGCGGGCAACCTA
	125	TCGGTGCTGTTGCAAAAGCCTGTAG	TCTACAGGCTTTTGCAACAGCACCG
	126	TTGATGAAAGTTTGCGGCAGGACAC	TGTGTCCTGCCGCAAACTTTCATCA
	127	TGTTGAGTGCAGGATGCAGCGATAG	TCTATCGCTGCATCCTGCACTCAAC
]	128	TAACATTGCGCGGTCCACCAGGGTT	TAACCCTGGTGGACCGCGCAATGTT
35	129	TGGGCAGTTAGAGAGGGCCAGAAGT	TACTTCTGGCCCTCTCTAACTGCCC
	130	TTCGAGCTGGTCCCCGTGAACGTGT	TACACGTTCACGGGGACCAGCTCGA
	131	TGTCTTGGGGGCCGCTTAGTGAAAA	TTTTCACTAAGCGGCCCCCAAGAC
	132	TACTGTTGGCTTGCTCTCATGTCCA	TTGGACATGAGAGCAAGCCAACAGT
	133	TAGGACCATTCGGAAGGCGAAGATA	TTATCTTCGCCTTCCGAATGGTCCT
40	134_	TCTTGGGAGGCATCCGCTATAAGGA	TTCCTTATAGCGGATGCCTCCCAAG
	135	TAATAAACGGAACGCACCGCTACAG	TCTGTAGCGGTGCGTTCCGTTTATT

	136	TTTGTACGTGCGGTCCCCATAAGCA	TTGCTTATGGGGACCGCACGTACAA
	137	TCGCACCAAACTGAGTTTCCCAGAC	TGTCTGGGAAACTCAGTTTGGTGCG
	138	TACCTGATCGTTCCCCTATTGGGAA	TTTCCCAATAGGGGAACGATCAGGT
	139	TGGAACAGAGGCGAGGGGACTGAGC	TGCTCAGTCCCCTCGCCTCTGTTCC
5	140	TCCCTGCCTTGGCGTGTCGGCTTAT	TATAAGCCGACACGCCAAGGCAGGG
	141	TACTCTGACACGCCAACTCCGGAAG	TCTTCCGGAGTTGGCGTGTCAGAGT
	142	TCTGACGGTTTTCATTCGGCGTGCC	TGGCACGCCGAATGAAAACCGTCAG
ĺ	143	TTGCGGTGGTTCATTGGAGCTGGCC	TGGCCAGCTCCAATGAACCACCGCA
	144	TGCATGGCCAACTAGTGACTCGCAA	TTTGCGAGTCACTAGTTGGCCATGC
10	145	TAGGCCGTAAAGCGAATCTCACCTG	TCAGGTGAGATTCGCTTTACGGCCT
	146	TCGAATATTATGCCGAGAATCCGCG	TCGCGGATTCTCGGCATAATATTCG
	147	TACAGACGAGCTCCCAACCACATGA	TTCATGTGGTTGGGAGCTCGTCTGT
	148	TGGACGGTTTGTGCTGGATTGTCTG	TCAGACAATCCAGCACAAACCGTCC
	149	TAAAGGCTATTGAGTTGGTTGGGCG	TCGCCCAACCAACTCAATAGCCTTT
15	150	TGATGGCCTATTCGGAGATCGGGCC	TGGCCGATCTCCGAATAGGCCATC
	151	TGATCCAGTAGGCAGCTTCATCCCA	TTGGGATGAAGCTGCCTACTGGATC
	152	TAATAACTCGCGCGGGTATGCTTCT	TAGAAGCATACCCGCGCGAGTTATT
	153	TGGAGGAGGTTTGTCTCGGAAAGCA	TTGCTTTCCGAGACAAACCTCCTCC
	154	TCTTTGGTATGGCACATGCTGCCCG	TCGGGCAGCATGTGCCATACCAAAG
20	155	TAGAAAGGCTCGAGCAACGGGAACT	TAGTTCCCGTTGCTCGAGCCTTTCT
	156	TAATCTACCGCACTGGTCCGCAAGT	TACTTGCGGACCAGTGCGGTAGATT
	157	TCGTGGCGGCCACAGTTTTTGGAGG	TCCTCCAAAAACTGTGGCCGCCACG
	158	TTTGCAGTTCAATCCATACGCACGT	TACGTGCGTATGGATTGAACTGCAA
	159	TGGCCCAAAGCCCCAGACCATTTTA	TTAAAATGGTCTGGGGCTTTGGGCC
25	160	TCGCCTGTCTTTGTCTCCGGACAAT	TATTGTCCGGAGACAAGACAGGCG
	161	TTGAGGCAACAGGGGCCAAAAACTA	TTAGTTTTTGGCCCCTGTTGCCTCA
ļ	162	TAGCGGAAGTAGTCCTCGGCTCGTC	TGACGAGCCGAGGACTACTTCCGCT
	163	TGGCCCCAAGGCTTAGAGATAGTGG	TCCACTATCTCTAAGCCTTGGGGCC
	164	TGCACGTGAAGTTTAACCGCGATTC	TGAATCGCGGTTAAACTTCACGTGC
30	165	TAGCGGCAGAAACGTTCCTTGACGG	TCCGTCAAGGAACGTTTCTGCCGCT
	166	TTCGTCGAGCAGACGAGATTGCACG	TCGTGCAATCTCGTCTGCTCGACGA
	167	TTCTTTGCCGCGTAACTGACTGCTT	TAAGCAGTCAGTTACGCGGCAAAGA
	168	TTTTATGTGCCAAGGGGTTAACCGA	TTCGGTTAACCCCTTGGCACATAAA
	· 169	TTGTTACTGTGGTTCACGGCAGTCC	TGGACTGCCGTGAACCACAGTAACA
35	170	TCGCGCCTCGCTAGACCTTTTATTG	TCAATAAAAGGTCTAGCGAGGCGCG
Į.	171	TACAAATGCGTGAGAGCTCCCAACT	TAGTTGGGAGCTCTCACGCATTTGT
	172	TCGCGCAGATTATAGACCCGAATGT	TACATTCGGGTCTATAATCTGCGCG
	173	TCAAATAACGCCGCTGAATCGGCGT	TACGCCGATTCAGCGGCGTTATTTG
	174	TCCTTCGTGCATCGGTGATGATGTT	TAACATCATCACCGATGCACGAAGG
40	175	TTGAACACGAGCAACACTCCAACGC	TGCGTTGGAGTGTTGCTCGTGTTCA
	176	TCAGCAGATCCTTCGTAGCGGTCGT	TACGACCGCTACGAAGGATCTGCTG

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	177		TGGAACCTGGTGAGTTGTGCCTCAT	TATGAGGCACAACTCACCAGGTTCC
	178		TTCATAAGCGACAATCGCGGGCTTA	TTAAGCCCGCGATTGTCGCTTATGA
	179		TCCCAACGTCACTGAAGCTCACAGT	TACTGTGAGCTTCAGTGACGTTGGG
	180		TTGTCAGAGCCCGCGACTCAGACGG	TCCGTCTGAGTCGCGGGCTCTGACA
5	181		TTACACGAAGCCTCTCCGTGGTCCA	TTGGACCACGGAGAGGCTTCGTGTA
	182		TCTCAGAAGTCCTCGGCGAACTGGG	TCCCAGTTCGCCGAGGACTTCTGAG
	183		TATCCTTTTATCTACTCCGCGGCGA	TTCGCCGCGGAGTAGATAAAAGGAT
	184		TAGGCGTGCAGCAACAGGATAAACC	TGGTTTATCCTGTTGCTGCACGCCT
	185		TACTCTCGAGGGAGTCTCTGGCACA	TTGTGCCAGAGACTCCCTCGAGAGT
10	186		TTTGCCAGGTCCATCGAGACCTGTT	TAACAGGTCTCGATGGACCTGGCAA
	187		TTCCACTATAACTGCGGGTCCGTGT	TACACGGACCCGCAGTTATAGTGGA
	188		TGCCCAGTCGGCTCTAACAAGTTCG	TCGAACTTGTTAGAGCCGACTGGGC
	189		TCGGAACGGATAATCGGCGTCAGGT	TACCTGACGCCGATTATCCGTTCCG
	190		TTAAAATAAGCGCCTGGCGGGAGGA	TTCCTCCCGCCAGGCGCTTATTTTA
15	191		TGCGCACTCGTGAAACCTTTCTCGC	TGCGAGAAAGGTTTCACGAGTGCGC
	192		TAGTTTGCCAGGTACTGGCAAGTGC	TGCACTTGCCAGTACCTGGCAAACT
	193		TACAACGAGGGATGTCCAGCGGCAT	TATGCCGCTGGACATCCCTCGTTGT
	194		TTTCGCAGCACCCGCTAGGTACAGT	TACTGTACCTAGCGGGTGCTGCGAA
	195		TTAACCCGATTTTTGCGACTCTGCC	TGGCAGAGTCGCAAAAATCGGGTTA
20	196		TCGTCGCATTGCAAGCGTAGGCTTG	TCAAGCCTACGCTTGCAATGCGACG
	197		TGAGCTGACGTCACCATCAGAGGAA	TTTCCTCTGATGGTGACGTCAGCTC
:	198		TGGAGGCTGGGGGTCGCGCTTAAGT	TACTTAAGCGCGACCCCCAGCCTCC
	199		TTTGTGGGAACCGCACTAGCTGGCT	TAGCCAGCTAGTGCGGTTCCCACAA
	200		TCCCTCGCACTGTGTTCACCCTCTT	TAAGAGGGTGAACACAGTGCGAGGG
25	201		TTCATTGACTCGAATCCGCACAACG	TCGTTGTGCGGATTCGAGTCAATGA
	202		TACAGGGGTTGGCCTTCGTACGTAC	TGTACGTACGAAGGCCAACCCCTGT
	203		TAGGCCGTGCAACATCACACAGGAT	TATCCTGTGTGATGTTGCACGGCCT
	204		TGGGCCGTGGTCACGTAATATTGGC	TGCCAATATTACGTGACCACGGCCC
	205		TGCGCGGACATGAAACGACAAGGCC	TGGCCTTGTCGTTTCATGTCCGCGC
30	206		TCTTATTGGGTGCCGGTGTCGGATT	TAATCCGACACCGGCACCCAATAAG
	207		TGGGGCGGTTACCAAAAAATCCGAT	TATCGGATTTTTTGGTAACCGCCCC
		4	TCCGTCGCATACCGGCTACGATCAA	TTTGATCGTAGCCGGTATGCGACGG
		5	TATGGCCGTGCTGGGGACAAGTCAA	TTTGACTTGTCCCCAGCACGGCCAT
	210		TACGAAAAAGTGTGCGGATCCCCT	TAGGGGATCCGCACACTTTTTCGT
35	211		TCCAAGTACACCGCACGCATGTTTA	TTAAACATGCGTGCGGTGTACTTGG
	_ 212		TATCGTGCGTGGAGTGTCGCATCTA	TTAGATGCGACACTCCACGCACGAT
	213		TTCCAGATACCGCCCGAACTTTGA	TTCAAAGTTCGGGGCGGTATCTGGA
	214		TTCTGCTGGCAGCACGTGAAGTGGC	TGCCACTTCACGTGCTGCCAGCAGA
	215		TTTGAAATTGCTCTGCCGTCAGTCA	TTGACTGACGGCAGAGCAATTTCAA
40	216		TAGTCAGGCGAGATGTTCAGGCAGC	TGCTGCCTGAACATCTCGCCTGACT
	217		TACAAGCCGACGTTAAGCCCGCCCA	TTGGGCGGGCTTAACGTCGGCTTGT

	218	TCCCTAATGAGGCCAGTAACCTGCA	TTGCAGGTTACTGGCCTCATTAGGG
	219	TGTGAGACACACATCCCCTCCAATG	TCATTGGAGGGGATGTGTGTCTCAC
	220	TCGACGGATGCAGAGTTCAGTGGTC	TGACCACTGAACTCTGCATCCGTCG
	221	TCCCGCATGCCTGGCGGTATTACAA	TTTGTAATACCGCCAGGCATGCGGG
5	222	TTTAGCAAAGCGGCGCCGTTAGCAA	TTTGCTAACGGCGCCGCTTTGCTAA
i	223	TCCCGACACGGGTCAGCGTAATAAT	TATTATTACGCTGACCCGTGTCGGG
	224	TGCGACGGCCCTGAGGTATGTCGTC	TGACGACATACCTCAGGGCCGTCGC
	225	TCAAAAGTGTGTTCCCTTGCGCTTG	TCAAGCGCAAGGGAACACACTTTTG
	226	TTCTCGAAGCACAGCCCGGTTATTG .	TCAATAACCGGGCTGTGCTTCGAGA
10	227	TATGCTAACCGTTGGCCATGGAACT	TAGTTCCATGGCCAACGGTTAGCAT
	228	TCTTGCGGAGTGTTAGCCCAGCGGT	TACCGCTGGGCTAACACTCCGCAAG
	229	TTGCTCCCTAGGCGCTCGGAGGAGT	TACTCCTCCGAGCGCCTAGGGAGCA
	230	TCCAATGCCTTTGAGTAAGCGATGG	TCCATCGCTTACTCAAAGGCATTGG
	231	TAGCAGATAACGTCCCAATGACGCC	TGGCGTCATTGGGACGTTATCTGCT
15	232	TTTGACCATTACGTGTTGCGCCCAT	TATGGGCGCAACACGTAATGGTCAA
	233	TTCGCGTATTTGCGGAATTCGTCTG	TCAGACGAATTCCGCAAATACGCGA
	234	TCTGCGTGTCAACAATGTCCCGCAG	TCTGCGGGACATTGTTGACACGCAG
	235	TTCTGGTGCCACGCAAGGTCCACAG	TCTGTGGACCTTGCGTGGCACCAGA
	236	TCTCCGGGAGGTCACTTAATTGCGG	TCCGCAATTAAGTGACCTCCCGGAG
20	237	TTTTCGTGATTGCCCGGAGGAGGC	TGCCTCCTCCGGGCAATCACGAAAA
·	238	TTCGGGATGTAGCTGGGGCTACCGG	TCCGGTAGCCCCAGCTACATCCCGA
	239	TCGAGCCAACGCAAACACGTCCTTG	TCAAGGACGTGTTTGCGTTGGCTCG
	240	TGCAAAGCCTTTGTGGGGCGGTAGT	TACTACCGCCCCACAAAGGCTTTGC
	241	TATTCGACCGGAAATGAGGTCTTCG	TCGAAGACCTCATTTCCGGTCGAAT
25	242	TTTCGCTTGCTGAGTTGCTCTGTTC	TGAACAGAGCAACTCAGCAAGCGAA
	243	TCGCGTGAAGACCCCATTCCCGAGT	TACTCGGGAATGGGGTCTTCACGCG
	244	TAACCGTATTCGCGGTCACTTGTGG	TCCACAAGTGACCGCGAATACGGTT
	245	TGGGGCCAACCGTTTCGAGGCGTAT	TATACGCCTCGAAACGGTTGGCCCC
	246	TTTCGGCTGGCAGTCCAAACGGCTT	TAAGCCGTTTGGACTGCCAGCCGAA
30	247	TGGGTGTGGTTAGAATGCACGGTTC	TGAACCGTGCATTCTAACCACACCC
	248	TGCGAGGACCGAACTAGACAAACGG	TCCGTTTGTCTAGTTCGGTCCTCGC
	249	TACGCACGCGTGACCGAAGTTGCTG	TCAGCAACTTCGGTCACGCGTGCGT
	250	TTAAAAGGTCGCTTTGAAAGGGGGA	TTCCCCCTTTCAAAGCGACCTTTTA
	251	TTGCGATCGCTAACTGCTGGGACAA	TTTGTCCCAGCAGTTAGCGATCGCA
35	252	TGGAGGTATAAGCGGAGCGGCCTCA	TTGAGGCCGCTCCGCTTATACCTCC
	253	TATGCTGACATGTCGTGCACCTCGT	TACGAGGTGCACGACATGTCAGCAT
	254	TTGTGGTTAAAGCGTCCGTTCAACG	TCGTTGAACGGACGCTTTAACCACA
	255	TCGTTCACACCGGCGTAAGCTGCGT	TACGCAGCTTACGCCGGTGTGAACG
	256	TCCTATCCCGGCGAGAACTTCTGTG	TCACAGAAGTTCTCGCCGGGATAGG
40	257	TGTCTGCACTCACGCAGCGAGGGA	TTCCCTCCGCTGCGTGAGTGCAGAC
[	258	TGCACGAGTTGGTGCTCGGCAGATT	TAATCTGCCGAGCACCAACTCGTGC

		<u> </u>	T
	259	TAACGTCGCACGACACGTTCGTC	TGACGAACGTGTGTCGTGCGACGTT
:	260	TATGCGCGCTTATCCTAGCATGGTC	TGACCATGCTAGGATAAGCGCGCAT
	261	TTCACGTTTTCGTCTCGACATGAGG	TCCTCATGTCGAGACGAAAACGTGA
	262	TTGTGCCTCATCCTTAGGATACGGC	TGCCGTATCCTAAGGATGAGGCACA
5	263	TAGGTGGTGTGGGTCAACCGCTTTA	TTAAAGCGGTTGACCCACACCACCT
	264	TCTGGATCGAAGGGACTGCAAGCTC	TGAGCTTGCAGTCCCTTCGATCCAG
	265	TTAGATCAACTCGCGTACGCATGGA	TTCCATGCGTACGCGAGTTGATCTA
	266	TGATCCTGCGGAGAAGAGAGTGCAG	TCTGCACTCTCTTCTCCGCAGGATC
	267	TTACGTGTGGAGATGCCCCGAACCG	TCGGTTCGGGGCATCTCCACACGTA
10	268	TGCGCTATGTCAATCGTGGGCGTAG	TCTACGCCCACGATTGACATAGCGC
	269	TAGCGAGGTTTCTAGCGTCGACACC	TGGTGTCGACGCTAGAAACCTCGCT
	270	TACCCAGGTTTTGCCGTTGTGGAAT	TATTCCACAACGGCAAAACCTGGGT
	271	TCCCTGTTAACGGCTGCGTAGTCTC	TGAGACTACGCAGCCGTTAACAGGG
	272	TAGGCCGATTTCACCCGCCAATTGC	TGCAATTGGCGGGTGAAATCGGCCT
15	273	TGAGCCCTCACTCCTTGCCCTTTGA	TTCAAAGGGCAAGGAGTGAGGGCTC
	274	TGGGTGGACATCCGCCTCGCAGTCA	TTGACTGCGAGGCGGATGTCCACCC
	275	TGATGGCTGAGAACCGTGCTACGAT	TATCGTAGCACGGTTCTCAGCCATC
	276	TTCGACGTTAGGAGTGCTGCCAGAA	TTTCTGGCAGCACTCCTAACGTCGA
	277	TCGAATGGGTCTGGACCTTGCATAG	TCTATGCAAGGTCCAGACCCATTCG
20	278	TGTGCACCAGACATTCGAACTCGGA	TTCCGAGTTCGAATGTCTGGTGCAC
	279	TAGAGGCCCCGTATATCCCATCCAT	TATGGATGGGATATACGGGGCCTCT
	280	TAACGCCTGTTCAGAGCATCAGCGG	TCCGCTGATGCTCTGAACAGGCGTT
	281	TAAGGCTCAACACGCCTATGTGCGC	TGCGCACATAGGCGTGTTGAGCCTT
	282	TAGTCCGTGTTGCCAGATTGGCTCG	TCGAGCCAATCTGGCAACACGGACT
25	283	TATGTCCCATGTAAAGACGCGTGTG	TCACACGCGTCTTTACATGGGACAT
	284	TATGGAGTCTGCTCACGCCCAAAGG	TCCTTTGGGCGTGAGCAGACTCCAT
	285	TCGGCCTCCAACAAGGAGCACTAAC	TGTTAGTGCTCCTTGTTGGAGGCCG
	286	TCAGAGCCGTGGCAACATTGCGAGC	TGCTCGCAATGTTGCCACGGCTCTG
	287	TTCATTTGAATGAGGTGCGCACCGG	TCCGGTGCGCACCTCATTCAAATGA
30	288	TGACGTACCGGAAGCGCCGTATAAA	TTTTATACGGCGCTTCCGGTACGTC
	289	TATGCGAGCAATGGGATCCGGATTC	TGAATCCGGATCCCATTGCTCGCAT
	290	TAGAGTGAGGCCTCCCTGACCAGTG	TCACTGGTCAGGGAGGCCTCACTCT
	291	TCGCACCGTAAGTAGATTTGCCCGC	TGCGGGCAAATCTACTTACGGTGCG
	292	TTGAACCTTTGAGCACGTCGTGCGC	TGCGCACGACGTGCTCAAAGGTTCA
35 .	293	TTCCGCCTTTTTGGTTACCTCGAAG	TCTTCGAGGTAACCAAAAAGGCGGA
. [	294	TGAACGCCAACGGCACTAACACATC	TGATGTGTTAGTGCCGTTGGCGTTC
Ī	295	TCCGACAGCAGCCAAGACGTCCCAG	TCTGGGACGTCTTGGCTGCTGTCGG
Ī	296	TCATAAAAAAACCTGGGGCTCTGCG	TCGCAGAGCCCCAGGTTTTTTATG
Ī	297	TTGCCAACTGTGCAGACCGGACTTA	TTAAGTCCGGTCTGCACAGTTGGCA
40	298	TGGCGAAAGAGCGAAACCGGCTCGT	TACGAGCCGGTTTCGCTCTTTCGCC
[	299	TGGGATGCGTATTTTAGCGAACACG	TCGTGTTCGCTAAAATACGCATCCC

	300	TTGGGATTCAGCGACCAGTACGCGA	TTCGCGTACTGGTCGCTGAATCCCA
	301	TCCCGATATTCGCCCGGCCTATTCG	TCGAATAGGCCGGGCGAATATCGGG
	302	TCGAGAAGATGCCTCACGCAACCAA	TTTGGTTGCGTGAGGCATCTTCTCG
	303	TAACCTTGACCCGTGGATGACGCTA	TTAGCGTCATCCACGGGTCAAGGTT
5		6 TTTGCAACGGGCTGGTCAACGTCAA	TTTGACGTTGACCAGCCCGTTGCAA
		7 TCGCATAGGTTGCCGATTTCGTCAA	TTTGACGAAATCGGCAACCTATGCG
	306	TGCTTCCGGATGAACGGGATGGTTG	TCAACCATCCCGTTCATCCGGAAGC
	307	TCCCTCCATGTTCTTCGAACGGTTT	TAAACCGTTCGAAGAACATGGAGGG
	308	TTTGATGGGCGGCAATGCTCTTGCT	TAGCAAGAGCATTGCCGCCCATCAA
10	309	TATTGTGAGATGCGCCAAATTCCCC	TGGGGAATTTGGCGCATCTCACAAT
	310	TTCAGCACAGCCAGACGGTCAACTT	TAAGTTGACCGTCTGGCTGTGCTGA
	311	TACTCCACTCCTCGGTGGCAAACTA	TTAGTTTGCCACCGAGGAGTGGAGT
	312	TTCTGGGCATGCCTGGACGGAGACG	TCGTCTCCGTCCAGGCATGCCCAGA
	313	TTCTCAACTCCGGTACGACGAAACA	TTGTTTCGTCGTACCGGAGTTGAGA
15	314	TTTGCGTGGTCAAAGGCGCAACGTG	TCACGTTGCGCCTTTGACCACGCAA
	315	TAGACAGCGATCCGCGGCTCATGAT	TATCATGAGCCGCGGATCGCTGTCT
	316	TCGCGTCTCTAACTGAGAGCAGCCA	TTGGCTGCTCTCAGTTAGAGACGCG
	317	TAGGCGCACATGTACGGACATTCAG	TCTGAATGTCCGTACATGTGCGCCT
	318	TGATGAGTGGCACGTCGGTGTGTAA	TTTACACACCGACGTGCCACTCATC
20	319	TTGATCCATATTGTCGGACGTTGCG	TCGCAACGTCCGACAATATGGATCA
	320	TACCTGCCGGGAGTTCATAGGCTAG	TCTAGCCTATGAACTCCCGGCAGGT
	321	TAGCATTGGCGTTTTTCCGCAACGA	TTCGTTGCGGAAAAACGCCAATGCT
	322	TGGTAATATTCAGCGCGACCGCTCA	TTGAGCGGTCGCGCTGAATATTACC
	323	TATAGCGTACGACGAGGTGACGCGC	TGCGCGTCACCTCGTCGTACGCTAT
25	324	TTAGGTCACGATGCGTTTGACGCTA	TTAGCGTCAAACGCATCGTGACCTA
j	325	TACTGCCCGTACCTCTGGTTCTGGC	TGCCAGAACCAGAGGTACGGGCAGT
	326	TCCTTTGGCCTGAAGTTGTCGTAGC	TGCTACGACAACTTCAGGCCAAAGG
	327	TGTGCCCCACGAGCGTATCGTTGTA	TTACAACGATACGCTCGTGGGGCAC
	328		TTTGCTCCAGGCCCACGTAGCGCCT
30	329	TGGGTGCTACCATTGCATTAGTCCG	TCGGACTAATGCAATGGTAGCACCC
	330	TACCACGCGCGTACGTGTAACCGAG	TCTCGGTTACACGTACGCGCGTGGT
,	331	TCCATGATGCATTGGGTGCATTTAG	TCTAAATGCACCCAATGCATCATGG
	332	TGGTCCGGCCCTACGAAACGTTCGA	TTCGAACGTTTCGTAGGGCCGGACC
	333	TCCGTGTGGCTGGAGATTCGTGTGA	TTCACACGAATCTCCAGCCACACGG
35	334	TGTTAGGGCGACGCATATTGGCACA	TTGTGCCAATATGCGTCGCCCTAAC
. [	335	TGGGTCAGTCAGGTGCGTTAGGATC	TGATCCTAACGCACCTGACTGACCC
ļ	336	TGCCGTGAAGTCGAATGCAGATCGA	TTCGATCTGCATTCGACTTCACGGC
].	337	TGCCACCACCAGTGCATTCAGGTA	TTACCTGAATGCACTGGGTGGTGGC
Ļ	338	TGAGCTTAGTTTGCGGTCATCGGGC	TGCCCGATGACCGCAAACTAAGCTC
40	339	TTGTTTGCCGCCATTAGGGAGTAAC	TGTTACTCCCTAATGGCGGCAAACA
Ł	340	TGCTCCGCTGGATGTGCCGGTTTAG	TCTAAACCGGCACATCCAGCGGAGC

	341	TCGGTAGCATGCGAGATCCCTGTTA	TTAACAGGGATCTCGCATGCTACCG
	342	TCTACGCTCTACCAGTTGCCTGCGA	TTCGCAGGCAACTGGTAGAGCGTAG
	343	TGTGCCTCCTGCTGTATTTGCCAAG	TCTTGGCAAATACAGCAGGAGGCAC
	344	TTTGCGACTCGACTTGGACGAGTAG	TCTACTCGTCCAAGTCGAGTCGCAA
5	345	TTCTGGGAGCTGTTTACTCCAGCCA	TTGGCTGGAGTAAACAGCTCCCAGA
	346	TTGCACGCGGAACTCCCTTTACCAT	TATGGTAAAGGGAGTTCCGCGTGCA
	347	TTGGCAGCAAATGAATCGAAAGCAC	TGTGCTTTCGATTCATTTGCTGCCA
	348	TAACTGGTGACGCGGTACAGCGAAG	TCTTCGCTGTACCGCGTCACCAGTT
	349	TAGACGATTACGCTGGACGCCGTCG	TCGACGCGTCCAGCGTAATCGTCT
10	350	TATGCCCTCCTTCATGGAAAGGGTT	TAACCCTTTCCATGAAGGAGGGCAT
	351	TATTCTCGGAGCGTATGCGCCAGAA	TTTCTGGCGCATACGCTCCGAGAAT
	352	TATAGCGGAGTTTGGGTACGCGAAC	TGTTCGCGTACCCAAACTCCGCTAT
	353	TACCTACGCATACCGCTTGGCGAGG	TCCTCGCCAAGCGGTATGCGTAGGT
	354	TGATTACCTGAATGGCCAAGCGAGC	TGCTCGCTTGGCCATTCAGGTAATC
15	355	TCCTGTTAGCATCACGGCGCTTAGG	TCCTAAGCGCCGTGATGCTAACAGG
	356	TCGGAATGATGCGCTCGACAACGCT	TAGCGTTGTCGAGCGCATCATTCCG
	357	TTGAGAGAGGCGTTGGTTAAGGCAA	TTTGCCTTAACCAACGCCTCTCTCA
	358	TAAGCAGGCGAAGGGATACTCCTCG	TCGAGGAGTATCCCTTCGCCTGCTT
	359	TTCACGACAGACGGGCCGAGATTAC	TGTAATCTCGGCCCGTCTGTCGTGA
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	361	TGCTGGTTGCGGTAGGATCGCATAT	TATATGCGATCCTACCGCAACCAGC
	362	TTTGTGAATCCGTTCTGTCCCCGAC	TGTCGGGGACAGAACGGATTCACAA
	363	TTGGGCTCCTCTGAGGCGAGATGGC	TGCCATCTCGCCTCAGAGGAGCCCA
	364	TGGATAGAGTGAATCGACCGGCAAC	TGTTGCCGGTCGATTCACTCTATCC
25	365	TTGCACCGAACGTGCACGAGTAATT	TAATTACTCGTGCACGTTCGGTGCA
	366	TGCCAGTATTCTCGGGTGTTGGACG	TCGTCCAACACCCGAGAATACTGGC
	367	TTCGCTACCTAAGACCGGGCCATAC	TGTATGGCCCGGTCTTAGGTAGCGA
	368	TTGGCATTGACGAGCAGCAGTCAGT	TACTGACTGCTGCTCAATGCCA
•	369	TCGCGTCCCAGCGCCCTTGGAGTAT	TATACTCCAAGGGCGCTGGGACGCG
30	370	TATGAAGCCTACCGGGCGACTTCGT	TACGAAGTCGCCCGGTAGGCTTCAT
	371	TCCAGACAGATGGCCTGGAACCATG	TCATGGTTCCAGGCCATCTGTCTGG
	372	TTGGCGTGGGACCATCTCAAAGCTA	TTAGCTTTGAGATGGTCCCACGCCA
	373	TCCGCATGGGAACACGTGTCAAGGT	TACCTTGACACGTGTTCCCATGCGG
	374	TGCCCACTCGTCAGCTGGACGTAAT	TATTACGTCCAGCTGACGAGTGGGC
35	375	TATTACGGTCGTGATCCAGAAAGCG	TCGCTTTCTGGATCACGACCGTAAT
-	376	TTGCGAGGTGAGCACCTACGAGAGA	TTCTCTCGTAGGTGCTCACCTCGCA
	377	TGGGCCGCATTCTTGATGTCCATTC	TGAATGGACATCAAGAATGCGGCCC
	378	TCCTCGGATGTGGGCTCTCGCCTAG	TCTAGGCGAGAGCCCACATCCGAGG
	379	TTAGGCATGTTGGCGTGAGCGCTAT	TATAGCGCTCACGCCAACATGCCTA
40	380	TCGATACGAACGAGGATGTCCGCCT	TAGGCGGACATCCTCGTTCGTATCG
Į	381	TTACGCCGGTTAGCACGGTGCGCTA	TTAGCGCACCGTGCTAACCGGCGTA

	382		TCATACGATGTCCGGGCCGTGTCGC	TGCGACACGGCCCGGACATCGTATG
	383		TATCCGCAGTTGTATGGCGCGTTAT	TATAACGCGCCATACAACTGCGGAT
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	385		TATTGGAGTGTTTTGGTGAATCCGC	TGCGGATTCACCAAAACACTCCAAT
5	386		TGAACCGAGCCAACGTATGGACACG	TCGTGTCCATACGTTGGCTCGGTTC
	387		TGCCGTCAAGCTTAAGGTTTTGGGC	TGCCCAAAACCTTAAGCTTGACGGC
	388		TACCTGCTTTTGGGTGGGTGATATG	TCATATCACCCACCCAAAAGCAGGT
	389		TAATCGTGGGCGCAGCAAACGTATA	TTATACGTTTGCTGCGCCCACGATT
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10	391		TACCCGTCGATGCTTCCTCCTCAGA	TTCTGAGGAGGAAGCATCGACGGGT
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	393		TTTCCGCATGAGTCAGCTTTGAAAA	TTTTTCAAAGCTGACTCATGCGGAA
	394		TGCAAAGTCCCACTGGCAAGCCGAT	TATCGGCTTGCCAGTGGGACTTTGC
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	397		TCAGATGAAGGATCCACGGCCGGAG	TCTCCGGCCGTGGATCCTTCATCTG
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	399		TTCCGCTAATTTCCAATCAGGGCTC	TGAGCCCTGATTGGAAATTAGCGGA
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20		9	TTTCGCTTTCGTGGCTGCACTTCAA	TTTGAAGTGCAGCCACGAAAGCGAA
	402		TCTTAGTTGGGGCGCGGTATCCAGA	TTCTGGATACCGCGCCCCAACTAAG
	403		TGCTCTAATGCCGTGGAGTCGGAAC	TGTTCCGACTCCACGGCATTAGAGC
	404		TCCGATTACAAATTGACTGACCGCA	TTGCGGTCAGTCAATTTGTAATCGG
	405		TAGACGTACGTGAGCCTCCCGTGTC	TGACACGGGAGGCTCACGTACGTCT
25	406		TAATGGAGCGATACGATCCAACGCA	TTGCGTTGGATCGTATCGCTCCATT
i	407		TGGAGGCGCTGTACTGATAGGCGTA	TTACGCCTATCAGTACAGCGCCTCC
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	410		TGCCCGCTAATCCGACACCCAGTTT	TAAACTGGGTGTCGGATTAGCGGGC
30	411		TCCATTGACAGGAGAGCCATGAGCC	TGGCTCATGGCTCTCCTGTCAATGG
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35	416		TCCGCTTAGGCCATACTCTGAGCCA	TTGGCTCAGAGTATGGCCTAAGCGG
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	418		TGTTCCCGACGCCAGTCATTGAGAC	TGTCTCAATGACTGGCGTCGGGAAC
[	419		TTAAAAGTTTCGCGGAGGTCGGGCT	TAGCCCGACCTCCGCGAAACTTTTA
ſ	420		TCGGTCCAGACGAGCTGAGTTCGGC	TGCCGAACTCAGCTCGTCTGGACCG
40	421		TCGGCGTAGCGGCTACGGACTTAAA	TTTTAAGTCCGTAGCCGCTACGCCG
[	422		TGCTTGGATGCCCATGCGGCAAGGT	TACCTTGCCGCATGGGCATCCAAGC

	423	TAGCGGGATCCCAGAGTTTCGAAAA	TTTTTCGAAACTCTGGGATCCCGCT
	424	TGAGCTTGAGAGCGAGGTCATCCTC	TGAGGATGACCTCGCTCTCAAGCTC
	425	TGCATCGGCCGTTTTGACCATATTC	TGAATATGGTCAAAACGGCCGATGC
	426	TCATAGCGCTGCACGTTTCGACCGC	TGCGGTCGAAACGTGCAGCGCTATG
5	427	TACCCGACAACCACCAATTCAAAAA	TTTTTTGAATTGGTGGTTGTCGGGT
	428	TGCGAACACTCATAAGAGCGCCCTG	TCAGGGCGCTCTTATGAGTGTTCGC
	429	TCCGCCGAGTGTAGAGAGACTCCGA	TTCGGAGTCTCTCTACACTCGGCGG
	430	TGACATCGGGAGCCGGAAACATGAG	TCTCATGTTTCCGGCTCCCGATGTC
	431	TTCGTGTAGACTCGGCGACAGGCGT	TACGCCTGTCGCCGAGTCTACACGA
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	434	TGCATGAGACTCCGCGAAGACATGT	TACATGTCTTCGCGGAGTCTCATGC
	435	TTCCTACATGTCGCGTCACGATCAC	TGTGATCGTGACGCGACATGTAGGA
	436	TGACCGATCGCGAAGTCGTACACAT	TATGTGTACGACTTCGCGATCGGTC
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	438	TACCGATAAGACTTGCATCCGAACG	TCGTTCGGATGCAAGTCTTATCGGT
	439	TTCCATAACCAGTCCGAAGTGCCGG	TCCGGCACTTCGGACTGGTTATGGA
	440	TACGCGCCCTGCATCTCGTATTTAA	TTTAAATACGAGATGCAGGGCGCGT
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	443	TGCAATGGACGCCAGACGATACCGG	TCCGGTATCGTCTGGCGTCCATTGC
	444	TGCTGGACTTAGTCGTGTTCGGCGG	TCCGCCGAACACGACTAAGTCCAGC
	445	TAGGCATCGTGCCGGATTGCTCCCT	TAGGGAGCAATCCGGCACGATGCCT
	446	TTGCGCATGTCGACGTTGAACAAAG	TCTTTGTTCAACGTCGACATGCGCA
25	447	TTTCGGGTCACATCCGATGCCATAC	TGTATGGCATCGGATGTGACCCGAA
	448	TACCCATCGCCGGAAAGCGATGTTG	TCAACATCGCTTTCCGGCGATGGGT
	449	TAAGCGCTGACTCGGCTAAGAATCA	TTGATTCTTAGCCGAGTCAGCGCTT
	450	TACTTCCAAGTCCTTGACCGTCCGA	TTCGGACGGTCAAGGACTTGGAAGT
	451	TTCTCAATATTCCCGTAGTCGCCCA	TTGGGCGACTACGGGAATATTGAGA
30	452	TAACAGTTCCTCTTTTTCCTGGCGC	TGCGCCAGGAAAAAGAGGAACTGTT
	453	TCGTCCTCCATGTTGTCACGAACAG	TCTGTTCGTGACAACATGGAGGACG
	454	TTGCGCAGACCTACCTGTCTTTGCT	TAGCAAAGACAGGTAGGTCTGCGCA
	455	TATGGACGGCTTCGCAGTCCTCCTT	TAAGGAGGACTGCGAAGCCGTCCAT
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35	457	TTGAACCCTGCCGCGAGCGATAACC	TGGTTATCGCTCGCGGCAGGGTTCA
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	459	TAGGGTACGTGTCGCAGCTTCGCGT	TACGCGAAGCTGCGACACGTACCCT
	460	TACCCTTGCTCCGCCATGTCTCTCA	TTGAGAGACATGGCGGAGCAAGGGT
	461	TGGGACAAGGATTGAAGCTGGCGTC	TGACGCCAGCTTCAATCCTTGTCCC
40	462	TTGTCGTTGCTCCCGAGTACCATTG	TCAATGGTACTCGGGAGCAACGACA
	463	TGTTGTCCGAGACGTTTGTGTCAGC	TGCTGACACAACGTCTCGGACAAC

	464		TGCTGGTGAACACTCACGAACCGCT	TAGCGGTTCGTGAGTGTTCACCAGC
	465		TGCAGACAGGGCAAATCGGTGCAAA	TTTTGCACCGATTTGCCCTGTCTGC
	466		TCCCATCACAACGAGTGGCGACTTT	TAAAGTCGCCACTCGTTGTGATGGG
	467		TGCTTCTACAGCTGGCGTGCTAGCG	TCGCTAGCACGCCAGCTGTAGAAGC
5	468		TGAATGTGTGCCGACCATTCTAGCC	TGGCTAGAATGGTCGGCACACATTC
	469		TCCAGCGGAAGTTAGAGCTCTGTGG	TCCACAGAGCTCTAACTTCCGCTGG
	470		TTTTTTACCGACCACTCCATGTCGG	TCCGACATGGAGTGGTCGGTAAAAA
	471		TGCGGCTATGTGATGACGGCCTAGC	TGCTAGGCCGTCATCACATAGCCGC
	472		TAGTACACGGGCGTGTTAGCGCTCC	TGGAGCGCTAACACGCCCGTGTACT
10	473		TTCCTGTGTGGTGGCGCACTCCCAC	TGTGGGAGTGCGCCACCACACAGGA
	474		TCCAACTAACCAATCGCGCGGATGA	TTCATCCGCGCGATTGGTTAGTTGG
	475		TAGTGAGTGACCAAGGCAGGAGCAA	TTTGCTCCTGCCTTGGTCACTCACT
	476		TCATCTTTCGCGGAGTTTATTGCGG	TCCGCAATAAACTCCGCGAAAGATG
	477		TCTTCGTCCGGTTAGTGCGACAGCA	TTGCTGTCGCACTAACCGGACGAAG
15	478		TCTCACGAAAACGTGGGCCCGAAAT	TATTTCGGGCCCACGTTTTCGTGAG
	479		TCGCAGCAGCTGAACTCTAGCATTG	TCAATGCTAGAGTTCAGCTGCTGCG
	480		TAGGAGACATACGCCCAAATGGTGC	TGCACCATTTGGGCGTATGTCTCCT
	481		TATTGAGAACTCGTGCGGGAGTTTG	TCAAACTCCCGCACGAGTTCTCAAT
	482		TCTCTTTGTAGGCCCAGGAGGAGCA	TTGCTCCTCCTGGGCCTACAAAGAG
20	483		TGCCGCAGGGTCGATAATTGGTCTA	TTAGACCAATTATCGACCCTGCGGC
	484		TAAACGCCGCCCTGAGACTATTGGG	TCCCAATAGTCTCAGGGCGGCGTTT
	485		TCTGAGTTGCCTGGAACGTTGGACT	TAGTCCAACGTTCCAGGCAACTCAG
	486		TCGGATGGGTTGCAGAGTATGGGAT	TATCCCATACTCTGCAACCCATCCG
	487		TCTGACCTTTGGGGGTTAGTGCGGT	TACCGCACTAACCCCCAAAGGTCAG
25	488		TGGAAATGAGAACCTTACCCCAGCG	TCGCTGGGGTAAGGTTCTCATTTCC
	489		TAACGCATCGTCCGTCAACTCATCA	TTGATGAGTTGACGGACGATGCGTT
	490		TTGGAGAGAGACTTCGGCCATTGTT	TAACAATGGCCGAAGTCTCTCCCA
	491		TTTGCGCTCATTGGATCTTGTCAGG	TCCTGACAAGATCCAATGAGCGCAA
	492		TAGCGCGTTAAAGCACGGCAACATT	TAATGTTGCCGTGCTTTAACGCGCT
30	493		TAGCCAGTAAACTGTGGGCGGCTGT	TACAGCCGCCCACAGTTTACTGGCT
	494		TCGACTGATGTGCAACCAGCAGCTG	TCAGCTGCTGGTTGCACATCAGTCG
	495		TGGTTGCTCATACGACGAGCGAGTG	TCACTCGCTCGTCGTATGAGCAACC
		10	TGTCCAACGCGCAACTCCGATTCAA	TTTGAATCGGAGTTGCGCGTTGGAC
•		.11	TTTGCCGCACCGTCCGTCATCTCAA	TTTGAGATGACGGACGGTGCGGCAA
35	498		TAGAACCTCCGCGCCTCCGTAGTAG	TCTACTACGGAGGCGCGGAGGTTCT
	499		TAAAGGAGCTTTCGCCCAACGTACC	TGGTACGTTGGGCGAAAGCTCCTTT
	500		TAGTGATTGTGCCACTCCACAGCTC	TGAGCTGTGGAGTGGCACAATCACT
	501	]	TGCGATCGTCGAGGGTTGAGCTGAA	TTTCAGCTCAACCCTCGACGATCGC
	502		TGGGAGACAGCCATTATGGTCCTCG	TCGAGGACCATAATGGCTGTCTCCC
40	503		TGAGACGCTGTCACTCCGGCAGAAC	TGTTCTGCCGGAGTGACAGCGTCTC
	504		TCCACCGGTCGCTTAAGATGCACTT	TAAGTGCATCTTAAGCGACCGGTGG

	505	TCGGCATAACGTCCAGTCCTGGGAC	TGTCCCAGGACTGGACGTTATGCCG
	506	TAAGCGGAACGGGTTATACCGAGGT	TACCTCGGTATAACCCGTTCCGCTT
	507	TTGCACACTAGGTCCGTCGCTTGAT	TATCAAGCGACGGACCTAGTGTGCA
	508	TAGGGAACCGCGTTCAAACTCAGTT	TAACTGAGTTTGAACGCGGTTCCCT
5	509	TGAATTACAACCACCGCTCGTGTT	TAACACGAGCGGGTGGTTGTAATTC
	510	TTTCAGTGCTCACGAAGCATGGATT	TAATCCATGCTTCGTGAGCACTGAA
	511	TTTAGTTTGGCGTTGGGACTTCACC	TGGTGAAGTCCCAACGCCAAACTAA
	512	TAATGCGACCTCGACGAGCCTCATA	TTATGAGGCTCGTCGAGGTCGCATT
	513	TCCGAAACCGTTAACGTGGCGCACA	TTGTGCGCCACGTTAACGGTTTCGG
10	514	TTAAAGTAACAAGGCGACCTCCCGC	TGCGGGAGGTCGCCTTGTTACTTTA
	515	TTAATGATTTTAGTCGCGGGGTGGG	TCCCACCCGCGACTAAAATCATTA
·	516	TGGCTACTCTAAGTGCCCGCTCAGG	TCCTGAGCGGGCACTTAGAGTAGCC
	517	TTGGCGGACGACTCAATATCTCACG	TCGTGAGATATTGAGTCGTCCGCCA
	518	TGGGCGTTAGGCGTAATAGACCGTC	TGACGGTCTATTACGCCTAACGCCC
15	519	TGCCACCTTTAGACGGCGGCTCTAG	TCTAGAGCCGCCGTCTAAAGGTGGC
	520	TGAGATGTGTAAACGTGCAGGCACC	TGGTGCCTGCACGTTTACACATCTC
	521	TTAGCTCGTGGCCCTCCAAGCGTGT	TACACGCTTGGAGGGCCACGAGCTA
	522	TGTGTCGGCGCTATTTGGCCTTACC	TGGTAAGGCCAAATAGCGCCGACAC
	523	TCCAGGGAAGCAACTGGTTGCCATT	TAATGGCAACCAGTTGCTTCCCTGG
20	524	TTTCCGAAACTAAGCCAGAACCGCT	TAGCGGTTCTGGCTTAGTTTCGGAA
	525	TGCAAACCCGGTAACCCGAGAGTTC	TGAACTCTCGGGTTACCGGGTTTGC
	526	TGCAAATGGCGTCATGCACGAACGT	TACGTTCGTGCATGACGCCATTTGC
	527	TAGTACTTTCGCGCCCAGTTTAGGG	TCCCTAAACTGGGCGCGAAAGTACT
	528	TAAGATCTGCGAGGCATCCCGGCTT	TAAGCCGGGATGCCTCGCAGATCTT
25	529	TGCAAGTGTATCGCACAGTGCGATT	TAATCGCACTGTGCGATACACTTGC
	530	TCCGACAAGGCCTCAATTCATTCTG	TCAGAATGAATTGAGGCCTTGTCGG
	531	TGTCTCGTCTCAACTTTAAGGCGCG	TCGCGCCTTAAAGTTGAGACGAGAC
	532	TATCCAGAGATCCGTTTTGCAGCGT	TACGCTGCAAAACGGATCTCTGGAT
	533	TGTCACCAGGAGGGAAGTTTCACCC	TGGGTGAAACTTCCCTCCTGGTGAC
30	534	TTTCCGTCAGGCGGATCAACGGAAT	TATTCCGTTGATCCGCCTGACGGAA
	535	TATGCCGGACACGCATTACACAGGC	TGCCTGTGTAATGCGTGTCCGGCAT
	536	TTGGGCCGCTTGGCGCTTTCATAGA	TTCTATGAAAGCGCCAAGCGGCCCA
	537	TCCTAGCGCGAGCTTTACTGACCAG	TCTGGTCAGTAAAGCTCGCGCTAGG
	538	TTTGGCCAGGAATATGGTCTCGAGA	TTCTCGAGACCATATTCCTGGCCAA
35	539	TGTCTGCGGCCGACTTGCTATGCAT	TATGCATAGCAAGTCGGCCGCAGAC
	540	TAACTTGCTCATTCTCAAGCCGACG	TCGTCGGCTTGAGAATGAGCAAGTT
	541	TACGTCAGCGATTGTGGCGAAATAT	TÀTATTTCGCCACAATCGCTGACGT
	542	TACGGCCTGCGTCAGCACATGCATC	TGATGCATGTGCTGACGCAGGCCGT
	543	TATACCTCCGCAGAACCATTCCGTT	TAACGGAATGGTTCTGCGGAGGTAT
40	544	TAGTTCGCGGTCCCACGATTCACTT	TAAGTGAATCGTGGGACCGCGAACT
İ	545 .	TTGCTCAATTTGTGCAGAAAACGCC	TGGCGTTTTCTGCACAAATTGAGCA

	546	TTTATCGCGAGAGACGACCGTGTCC	TGGACACGGTCGTCTCTCGCGATAA
	547	TGACGCGACGTGAGTAGTGGAAGCG	TCGCTTCCACTACTCACGTCGCGTC
	548	TATGGTAGGGCATTGGGCTTTCCT	TAGGAAAGCCCAATGCCCCTACCAT
	549	TCCAAATATAGCCGCGCGGAGACAT	TATGTCTCCGCGCGGCTATATTTGG
5	550	TGCAAACCCTGATTGAATCGTGCCC	TGGGCACGATTCAATCAGGGTTTGC
	551	TTAGCGTCTTGCGTGAAACCATGGG	TCCCATGGTTTCACGCAAGACGCTA
	552	TCCACCCGACAGCGCTGGACTCTT	TAAGAGTCCAGCGCTGTCGGGGTGG
	553	TACGAGCACTGAAGGCTGCTTTACG	TCGTAAAGCAGCCTTCAGTGCTCGT
	554	TCATATCAGCGTCGTCTAGCTCGCG	TCGCGAGCTAGACGACGCTGATATG
10	555	TTGATCCCGGACCGGCTAGACTAAT	TATTAGTCTAGCCGGTCCGGGATCA
	556	TGGCCCGACACTACAGGGTAATCA	TTGATTACCCTGTAGTGTCGGGGCC
	557	TGGCTCCAGGGCGAGATTATGAATG	TCATTCATAATCTCGCCCTGGAGCC
	558	TCAAAATCCGATGGGCGGAAAATTA	TTAATTTTCCGCCCATCGGATTTTG
	559	TCACAGGCGCATAGGGAGCAAGCTA	TTAGCTTGCTCCCTATGCGCCTGTG
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_	561	TTGGTACGCGGTCCATAGCAAGTCG	TCGACTTGCTATGGACCGCGTACCA
	562	TGACGCTGTGGCTCGGAAACTGTTC	TGAACAGTTTCCGAGCCACAGCGTC
	563	TCCTGGGTTCGCCGCGTGGTAACTG	TCAGTTACCACGCGGCGAACCCAGG
L	564	TTTCCCGCGTAGCCCAACAGCTATA	TTATAGCTGTTGGGCTACGCGGGAA
20	565	TTTCGCGGATTGCTGCCGCATAACA	TTGTTATGCGGCAGCAATCCGCGAA
	566	TAAAAATGGCACCGAAGTTGAGGCA	TTGCCTCAACTTCGGTGCCATTTTT
	567	TCATTCCGCGCGAGTTGAAATCCAG	TCTGGATTTCAACTCGCGCGGAATG
L	568	TACGCACGTTTTTTGGCACGGTTAA	TTTAACCGTGCCAAAAAACGTGCGT
L	569	TTGTCCATGACGTCGTTTCTCTGGT	TACCAGAGAAACGACGTCATGGACA
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	571	TCTCCAAACGCACACATCAAGCATC	TGATGCTTGATGTGTGCGTTTGGAG
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L	573	TGGTGTCGGAGGGTGGTGACCTCGA	TTCGAGGTCACCACCCTCCGACACC
_	574	TAGCGCTTTTGGTCATGATTTGCAA	TTTGCAAATCATGACCAAAAGCGCT
30	575	TCCGAGGACTTACGTCTGCCCAGGA	TTCCTGGGCAGACGTAAGTCCTCGG
<u> </u>	576	TGCCCAATCCAGTTCTTATGCGCCC	TGGGCGCATAAGAACTGGATTGGGC
	577	TCGGGTTAACCCACGCAAGTTATGA	TTCATAACTTGCGTGGGTTAACCCG
	578	TTGATTAGCGCTCAATACACGCGTG	TCACGCGTGTATTGAGCGCTAATCA
<u> </u>	579	TAAGGGCAGACCTTTGGTTCGACTG	TCAGTCGAACCAAAGGTCTGCCCTT
35	580	TGCGCCACAAGATTCACATGTCATT	TAATGACATGTGAATCTTGTGGCGC
L	581	TGCCATGTTCAAGGGCCTTTCGAAG	TCTTCGAAAGGCCCTTGAACATGGC
	582	TCGCGGTGTTTTGTCTAGGTGCCGG	TCCGGCACCTAGACAAAACACCGCG
	583	TCAACATTGTGGTGGCACTCCATCC	TGGATGGAGTGCCACCACAATGTTG
	584	TCGATACGCGCCGGTTTGTTAAATC	TGATTTAACAAACCGGCGCGTATCG
40	505	TCCCTATAAACCTCCCCACTCCTCC	TOOACOACTCCCCACCTTTATACCC
<del>-</del>	585	TGGCTATAAACGTGCGGACTGCTCC	TGGAGCAGTCCGCACGTTTATAGCC

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	587	TGTCTTCATCGGCCCGCGCAAGCTA	TTAGCTTGCGCGGGCCGATGAAGAC
	588	TGCGACACCCCTGTACTCTGATGC	TGCATCAGAGTACAGGGTGTGTCGC
	589	TGTAGCAGGGTCCGCAAGACCAAGC	TGCTTGGTCTTGCGGACCCTGCTAC
	590	TTCGCCAACGCAGGGTAACTGCCAT	TATGGCAGTTACCCTGCGTTGGCGA
5	591	TACTCCGAAGCTTCGAGCGGCACGA	TTCGTGCCGCTCGAAGCTTCGGAGT
	1	2 TCATCGTCCCTTTCGATGGGATCAA	TTTGATCCCATCGAAAGGGACGATG
•	1	3 TGCACGGGAGCTGACGACGTGTCAA	TTTGACACGTCGTCAGCTCCCGTGC
	594	TATCATCCCACGGCAGAGTGAAGAG	TCTCTTCACTCTGCCGTGGGATGAT
	595	TCGCTGGACTGGCCTATCCGAGTCG	TCGACTCGGATAGGCCAGTCCAGCG
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	597	TCGAACGTTCTCCGATGTAATGGCC	TGGCCATTACATCGGAGAACGTTCG
	598	TATACCGTGCGACAAGCCCCTCTGA	TTCAGAGGGGCTTGTCGCACGGTAT
	599	TAGCTCATTCCCGAGACGGAACACC	TGGTGTTCCGTCTCGGGAATGAGCT
	600	TTTTCATGCGGCCGTTGCAAATCAT	TATGATTTGCAACGGCCGCATGAAA
15	601	TACTCGAACGGACGTTCAATTCCCA	TTGGGAATTGAACGTCCGTTCGAGT
	602	TCTGCATGGTGTGGGTGAGACTCCC	TGGGAGTCTCACCCACACCATGCAG
	603	TCCGCGAGTGTGGATGGCGTGTTGA	TTCAACACGCCATCCACACTCGCGG
	604	TAATGTGTCGGTCCTAAGCCGGGTG	TCACCCGGCTTAGGACCGACACATT
	605	TTAAGACGAGCCTGCACAGCTTGCG	TCGCAAGCTGTGCAGGCTCGTCTTA
20	606	TGGCGTGGGAGGATAAGACGATGTC	TGACATCGTCTTATCCTCCCACGCC
	607	TTGCTCCATGTTAGGAACGCACCAC	TGTGGTGCGTTCCTAACATGGAGCA
I	608	TCGGTGTTGGTCGGACTGACGACTG	TCAGTCGTCAGTCCGACCAACACCG
	609	TCCGCGCGTATCTATCAGATCTGGG	TCCCAGATCTGATAGATACGCGCGG
	610	TAAAGCATGCTCCACCTGGAGCGAG	TCTCGCTCCAGGTGGAGCATGCTTT
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	612	TTGCTTACGCAGTGGATTGGTCAGA	TTCTGACCAATCCACTGCGTAAGCA
	613	TATGCAGATGAACAAATCGCCGAAT	TATTCGGCGATTTGTTCATCTGCAT
	614	TGCAATTCTGGGCCATGTATTCGTC	TGACGAATACATGGCCCAGAATTGC
	615	TAGGGTTCCTTACGCGTCGACATGG	TCCATGTCGACGCGTAAGGAACCCT
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	618	TTTATAGCAGTGCGCCAATGCTTCG	TCGAAGCATTGGCGCACTGCTATAA
	619	TCGAACAGTGCTGTCCGTCGCTCAA	TTTGAGCGACGGACAGCACTGTTCG
	620	TTCCGCGTGGACTGTTAGACGCTAT	TATAGCGTCTAACAGTCCACGCGGA
35	621	TCATTAGCCCGCTGTCGGTAACTGT	TACAGTTACCGACAGCGGGCTAATG
. ]	622	TGGAAAGAAACTCAGACGCGCAATG	TCATTGCGCGTCTGAGTTTCTTTCC
]	623	TCGACTCGCTGGACAGGAGAATCGT	TACGATTCTCCTGTCCAGCGAGTCG
	624	TCATGATCCTCTGTTTCACCCGCGG	TCCGCGGGTGAAACAGAGGATCATG
	625	TGGCGTAGCGCTCTAAAAGCTTCGG	TCCGAAGCTTTTAGAGCGCTACGCC
40	626	TAGTGATGCCATCAGGCCCGTATAC	TGTATACGGGCCTGATGGCATCACT
į	627	TTATGGAAAGGGCAACAGCGCTATC	TGATAGCGCTGTTGCCCTTTCCATA

	628	TCTGTGGTTGATGGAGGATCCACAC	TGTGTGGATCCTCCATCAACCACAG
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	630	TCAGGCCCGAACCACGCGGTTACAG	TCTGTAACCGCGTGGTTCGGGCCTG
	631	TGGCGCAATGGGCGCATAAATACTA	TTAGTATTTATGCGCCCATTGCGCC
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	633	TGATGGTGGACTGGAGCCCTTCCGC	TGCGGAAGGGCTCCAGTCCACCATC
	634	TCCGCGCATAGCGCAATAGGGGAGA	TTCTCCCCTATTGCGCTATGCGCGG
	635	TTCTTCTGGCTGTCCGGCACCCGAA	TTTCGGGTGCCGGACAGCCAGAAGA
	636	TGCGTTCGCAATTCACGGGCCCTTA	TTAAGGGCCCGTGAATTGCGAACGC
10	637-	TTCGTTTCGGCCTTGGAGAGTATCG	TCGATACTCTCCAAGGCCGAAACGA
	638	TAGGTGCAAGTGCAAGGCGAGAGGC	TGCCTCTCGCCTTGCACTTGCACCT
	639	TCGCCAGTTTCGATGGCTGACGTTT	TAAACGTCAGCCATCGAAACTGGCG
	640	TGCTTTACCGCCGATCCCAGATATC	TGATATCTGGGATCGGCGGTAAAGC
	641	TGTGCTTGACGAAGAGGCGAAATGT	TACATTTCGCCTCTTCGTCAAGCAC
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	644	TGGCGAGTCTTGTGGGGACATGTGT	TACACATGTCCCCACAAGACTCGCC
	645	TCCAAAGCGAAGCGAGCGTGTCTAT	TATAGACACGCTCGCTTCGCTTTGG
	646	TGCCGTAGGTTGCTCTTCACCGAAC	TGTTCGGTGAAGAGCAACCTACGGC
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	649	TTGTAGAGTCCCACGTAGCCGGCAT	TATGCCGGCTACGTGGGACTCTACA
	650	TCACTAGTCTGGGGCAAGGTGCATT	TAATGCACCTTGCCCCAGACTAGTG
	651	TTGTACTCGGCAGGCGCAATAGATT	TAATCTATTGCGCCTGCCGAGTACA
25	652	TAACGGGTATCGGAAGCGTAAAAGC	TGCTTTTACGCTTCCGATACCCGTT
	653	TCGGACTGCCCGTTTGCAAGTTGAG	TCTCAACTTGCAAACGGGCAGTCCG
	654	TATCGTTCAGCACTGGAGCCCGTAA	TTTACGGGCTCCAGTGCTGAACGAT
	655	TATGCATCGAACTAGTCGTGACGGC	TGCCGTCACGACTAGTTCGATGCAT
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	658	TCTCATCGTCCTAACACGAGAGCCC	TGGGCTCTCGTGTTAGGACGATGAG
	659	TAATGGCACTTCGGCGGTGATGCAA	TTTGCATCACCGCCGAAGTGCCATT
	660	TCCGTGGGAGGGAATCCAACCGAGG	TCCTCGGTTGGATTCCCTCCCACGG
	661	TAAATTCTCGTTGGTGACGGCTCAT	TATGAGCCGTCACCAACGAGAATTT
35	662	TTTGCTCTTATCCTTGTCCTGGGCG	TCGCCCAGGACAAGGATAAGAGCAA
	. 663	TTTAAGGATCAGGCGGAGCTTGCAG	TCTGCAAGCTCCGCCTGATCCTTAA
	664	TCGCGACTAAGGTGCTGCAACTCGA	TTCGAGTTGCAGCACCTTAGTCGCG
	665	TGCTCGATTTCACGGCCCGTTGTTC	TGAACAACGGGCCGTGAAATCGAGC
	666	TAGCAGAGTGCGTTGCAGAGGCTAA	TTTAGCCTCTGCAACGCACTCTGCT
40	667	TTGGAGGTGAGGACGACGTGCACTA	TTAGTGCACGTCGTCCTCACCTCCA
	668	TAACCGTTTAGGGTACATTCGCGGT	TACCGCGAATGTACCCTAAACGGTT

670 TGACTTTTTGCGGAAACGTCATGGT TACCATGACGTTTCCGCAAAAAGTC 671 TTGTCGGTTATTCCACCTGCAAGGA 672 TCTATGGTTTGCACTGCACGTCAAGGA 673 TAGCAGGGAAATTCAATCGTTCGCA TTCCTTGCAGGTGGAATAACCGACA 674 TCCTAACGAGGAAATTCAATCGTTCGCA TTGCAACGACGACGACACCACCACCGACACTCCAACTTGCATTTGCA TTGCAACGACGACTGCAACCATTTACCTTCC 675 TCCCGACCCTAACTCGCATTGAATA TTATTCAATGCGAGTTAGGTTCAGCG 676 TTTGCTTAATGGTGACGCCACGGAT TATCCGTAGGGTCACCATTAAGCAA 677 TGATGCTCGCCGTGTTTAGTTCACG TCGTAAACAACACGCCAGCATC 678 TTCGGATGACACACTTTCCACG TCCGTAACTAAACACGCCAGCACT 679 TATGCGGTCACCTTTCTCAGACGG TCCGTAACACACGCCAGCACT 679 TATGCGGTCACCTTTCTCGATCGG TCCCGAACAACACGCCAGCACT 680 TTTGCGAGGCTAAGCACACGGTAAA TTTTACCGTGGTTTAGCCTCCCAA 681 TAACTTAATTACCGCCTCTGGCGC TGCGCACAGAGACATCGGCAA 681 TAACTTAATTACCGCCTCTGGCGC TGCGCACAGAGCAGCACT 682 TGCGCCAACTTGTTCCGACAG TCTGTCGGAACAAGTCGCGCATACACACGCCGAACTTCACCACGCAACACGCGTAAAA TTTTACCGTGTGCTTAGCCTCGCAA 684 TTGATAGGGGGCAACTTGTTCCGACAG TCTGTCGGAACAAGTTCGCGGTACACACGCGAACACGCGTTAAACACACGCGGACACACGGCTACACGCACACGCACACACGCTTCACACGACACACGCAACACGCTTCACACACA					
671 TIGTCGGTTATTCCACCTGCAAGGA TTCCTGCGGTGGAATAACCGACA 672 TCTATGGTTTGCACTGCGCGTCGA TTCGAACGATGCAACCATAC 673 TAGCAGGGAAATTCAATCGTTCGCA TTCGAACGATGCAACCATAC 674 TCCTAACCGAGCGCTTAGCATTTCC TGGAACGATTGAATTCCCTGCT 675 TCCCGACCCTAACTGCCATTGCATT TTATTCATGCGAGTTAGCGTTCGCA 676 TTCCGGACCCTAACTCGCATTGAATA TTATTCATGCGAGTTAGGGTCGGG 676 TTTGCTTAATGGTGACCGCTGGATT TATCCGTGGCTCACCATTAAGCAC 677 TGATGCTCGCCGTGTTTAGTTCACG TCGTGAACTAAACACGGCGAGCATC 678 TTCGGATGCACGGTTTCCATGACG TCCTGAACTAAACACGGCGAGCATC 679 TATGCGGTCTACTTTCCGATCGG TCCCGATCGAGAAACTCGTCATCCGA 680 TTTGCGAGCCTAAGCACACGGTAAA TTTTACCGTGTCCTCCACA 681 TAACTTAATTACCGCCTCTGGCCC TGGCGCCAGAGGCGGTAATTAAGTT 682 TGTGACCGCAACTTGTTCCGACAG TCTCTGCAACAACTCGCATATCACAG 683 TTGCGGATTACCGATTCTTCCACACA TCTTCTAACCTCGCACA 684 TTGATAGGGGCCACGTTGATCAA TTTTAAGAGCGAATCGGTATCCACCA 685 TTCGCTCCGTAGCCACAG TTCTTCAACCTGCGACCACAGGCTAACCAGGTAAACAGGTTCACCACAGGAGAACAGTTCCCCCATACA 686 TTGCGCATTCCCGATTCAACTCACAGCACAGCTACACAGCTCACACAGCCCACACAGGCCCACACAGGCCTACACAGCCCACACAGGCCTACACAGCCCACACAGGCCTACACAGCCCACACAGCCCCCACACAGCCCCCTATCAA 686 TTGCGCATCGCACACAGCCTTCAACCACCACGCCCCACACAGCCCCCTATCAA 687 TAACCTGCACGCACACAGGCTTCAAA TTTTAACACGCAGGGCAACAAGCCGCACACAGCCCCCACACAGCCCCCTATCAA 688 TTGCGCATCGCACCACGCCTTCAAA TTTTAACACGCACGGACCCCCACACAGCCCCCCTACACAC 689 TGCCCATTCTGCACTGCCTCCAC TGGCCACACAGGCCCCTACACC 689 TTGCATTAGGTGCGGTCCCGTTCCAA TTTTAACACGCACGGACCCCTACACC 689 TTGCATTAGGTGCGGTCCCGTAGCCC TGGCCACACAGCCCCCTACACC 689 TTGCATTAGGTGCGGTCCCGTAGTCC TGGACACACCCCGCACCAATACAC 689 TTCCCACACCACCACGCGTGCCACCC TGGCCCCCACACACCCCCCTACACC 689 TTCCACACACCACCACCACCACCCCCTTCACACC 689 TTCCCACACCACCACCACCACCACCCCCTACACC 689 TTCCACACACCACCACCACCACCACCACCACCACCCCCCACA		669		TTATGATCGCTCGGCTCACAGTTTG	TCAAACTGTGAGCCGAGCGATCATA
672 TCTATGGTTTGCACTGCCCGTCGA TTCGACGGCGCAGTGCAAACCATAC 673 TAGCAGGGAAATTCAATCGTTCGCA TTGCGAACGATTGAATTTCCCTGCT 674 TCCTAACGAGCGCTTAGCATTTCC TGGAAATGCTTAGATTTCCCTGCT 675 TCCCGACCCTAACTCGCATTGAATA TTATTCAATGCGAGTTAGGGTCGGG 676 TCCCGACCCTAACTCGCATTGAATA TTATTCAATGCGAGTTAGGGTCGGG 677 TGATGCTCGCCGTGTTTAGTTCACG TCGTGAACTCACACACTAACCACGCGAGCATT 10 678 TTCGGATGACGACTTTCCATGACGG TCCGTGAACTAAACACGGCGAGCATC 679 TATGCGGTCTACTTCCATGACGG TCCGTATGGAAACTCGTCATCCGA 680 TTTGCGAGGACACACGGGTAAA TTTTACCGTGTGTGTAATGCACCGCA 681 TAACTTAATTACCGCCTCTGGCGC TCGCTCAGAAAACTAGCCCGCAA 681 TAACTTAATTACCGCCTCTGGCGC TGGCGCCAGAGGCGGAAATTAAGTT 682 TTGCGACCGCAACTTGTTCCGACAG TCTGTGGAACAAGTTGGCCGCAA 683 TTGCGACCGCAACTTGTTCCGACAG TCTGTGGAACAAGTTGGCGGTCAC 684 TTGATAGGGGGCCACGTTGAATCAGA TTTTAACAGGCGAACATGGGAACCAAGTCGGAACAAGTTGGCCCCCTATCA 685 TTGCGTCCGTACGCATTCACTGTAA TTTAACAGGAGGCAACGGGCAA 686 TTGTCAGCTGGAACAAGGCTTACAGCA TCTGTACCAACGTGGCCCCCTATCA 685 TTGCGTCCGTACGAGTTCATCGTAA TTCAACAGGAGGCACCCCCTATCA 686 TTGCACCGCAACAGGCTTACAGCA TCTGATCAACGTGGCCCCCTATCA 687 TAGCGTCGCATGACGCTTACGGCAC TGTGCCGTAACCGGTACCAGCGC 687 TAGCGTCGCATGACGCTTACGGCAC TGTGCCGTAACCGTACCAGCGC 680 TGTCGCATTCACGCTTTCCAACTTTTGACAGCCTGTTGCAGTGCCCCCAACCAGGCCCCACCCA		670		TGACTTTTTGCGGAAACGTCATGGT	TACCATGACGTTTCCGCAAAAAGTC
5 673 TAGCAGGGAAATTCAATCGTTCGCA TTGCGAACGATTGAATTTCCCTGCT 674 TCCTAACCGAGCGCTTAGCATTTCC TGGAAATGCTAAGCGCTCGGTTAGC 675 TCCCGACCCTAACTCGCATTGAATA TTATTCAATGCGACGCTCGGTTAGC 676 TTTGCTTAATGGTGACGCCACGGAT TATCCGTGGCTCACCATTAGGCAG 677 TGATGCTCGCCGTGTTTAGTTCACG TCGTGAACTAAACACGGGAGCATC 678 TTCGGATGACGAGTTTCCATGACGG TCCGTCATCAACACAGGGAACCCGAT 679 TATGCGGTCACTTTCTCGATCGGG TCCGTCATGGAAACTCGTCATCCGA 680 TTTGCGAGGCTAAGCACACGGTAAA TTTTACCGTGTGCTTAGCCTCGCGC 680 TTGGCAGGCTAAGCACACGGTAAA 681 TAACTTAATTACCGCCTCTGGCGC TGGCCCAGAGGAAAAGTAGACCGCAT 682 TGTGACCGCAACTTGTTCCGACAG TCTGGAACAAAGTTCGCGATCACAA 683 TTGCGGATTACCAACTCTTTCAACACGGCGCAACACGGTAAA 684 TTGATAGGGGCCACGTTGATCAGA TTCTGAACACAGGTACACGGTAAC 685 TTCGCTCCGTAGCGATCACAG TCTGATCAACAGGGAACACGTTCGCGACGAGGCAACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGGTACACGACGAGCACAACAGGCTTCACACGAGCACACGGCTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGGTACACACGACACACGACCACACACGACACACGACCACACACACGACCACACACACGCACACACACACGACACACACACACACACACACACACACACACACACACACAC		671		TTGTCGGTTATTCCACCTGCAAGGA	TTCCTTGCAGGTGGAATAACCGACA
674 TCCTAACCGAGCGCTTAGCATTTCC TGGAAATGCTAAGCGCTCGGTTAGG 675 TCCCGACCCTAACTCGCATTGAATA TTATTCAATGCGAGTTAGGGTCGGG 676 TTTGCTTAATGGTGACGCCACGGAT TATCCGTGGCGTCACCATTAAGCAA 677 TGATGCTCGCCGTGTTAGTTCACG TCGTGAACTAAACACGGCGAGCATCA 678 TTCGGATGACGAGTTTCCATGACGG TCCGTCATGAAAACACGGCGAGCATCA 679 TATGCGGTCTACTTTCTCGATCGGG TCCGTCATGAAAACACGCGCATCA 680 TTTGCGAGGCTAACTCTTCTCGATCGGG TCCCGATCGAGAAAATAGACCGCAT 681 TAACTTAATTACCGCCTCTGGCGC TGCGCACAGGCGGTAATTAAGTT 682 TGTGACCGCGAACTTGTTCCCACAG TCTGTCGAACACGTTCGCGCTCACA 683 TTGCGACGCCAACTTGTTCCCACAG TCTGTCGAACACGTTCGCGGTCAC 684 TTGATAGGGGCCACGTTCATCATA 685 TTCGCTCCGTAGCGATTCATCTTAA TTTTAAGAGCGAAACTCGTCACCGCACA 686 TTGTCAGCTGAGCACTTCATCATAA 687 TAGCGGTTCACCGTTTCAA TTCAAACGGAGCCACCTACCACGCTCACCACACCTCACCACACCCCACACACCCCACACACCCCACACACCCCACA		672		TCTATGGTTTGCACTGCGCCGTCGA	TTCGACGGCGCAGTGCAAACCATAG
675 TCCCGACCCTAACTCGCATTGAATA 676 TTTGCTTAATGGTGACGCCACGGAT 677 TGATGCTGCCGTGTTTAGTTCACG 678 TTCGGATGACGACACGGAT 677 TGATGCTGCCGTGTTTAGTTCACG 678 TTCGGATGACGACACGGTTACTTCACG 679 TATGCGGTCTACTTTCTCGATCGGG 679 TATGCGGTCTACTTTCTCGATCGGG 679 TATGCGGTCTACTTTCTCGATCGGG 680 TTTGCGAGGCTAAGCACACGGTAAA 681 TAACTTAATTACCGCCTCTGGCGC 682 TGTGACCGGAACTTGTTCCGACAG 682 TGTGACCGGAACTTGTTCCGACAG 683 TTGCGGATTACCGATTCGCTCTAA 684 TTGATAGGGGGCCACGTTGATCAA 685 TTGCGGATTACCGATTCGCTCTTAA 686 TTGCACCGGAACTTGTTCCGACAG 687 TAGCGTCACTTTACACGATTCACGAC 688 TTGCACCGGAACTTGATCACAA 688 TTGCACCGCAACACGGTTACACA 689 TTGCACCGCAACACGGTTCAA 689 TTGCAGCTGGACCATTCACGACA 680 TTGCAGCTGGACCACACACGGTTCAA 681 TTGAACGCACCGCAACACGGTTCAA 681 TTGAACGCACCGCAACACGCTTCACA 682 TTGCAGCTGGACCACACACGCTTCACA 683 TTGCAGCTGCATCACGACAC 684 TTGCAGCTGGACCACACACGCTTCACA 685 TTGCACCCCCAACACGCTTCACA 686 TTGCAGCACCACCACCACCACCACCACCACCACCACCACCAC	5	673		TAGCAGGGAAATTCAATCGTTCGCA	TTGCGAACGATTGAATTTCCCTGCT
676 TITGCTTAATGGTGACGCCACGGAT 677 TGATGCTCGCCGTGTTTAGTTCACG 678 TTCGGATGACGAGTTTCATGACGG 679 TATGCGGTGACGAGTTTCCATGACGG 679 TATGCGGTGACTATCCACGG 680 TITGCGAGGCTAGCACGGTAAA 681 TAACTTAATTACCGCCTCTGGCGCC 682 TGTGACCGCAACAGGTAAA 7TTTACCGTGTGTTTGCTCGAAC 682 TGTGACCGCAACTTGTTCCGACAG 683 TTGCGGATTACCGATTCGCACAG 684 TTGATTACGGTTCGCTCTTAA 684 TTGATTAGGGGGCCAGAGTTCACAGA 685 TTGCTCAGTTCGCTCTTAA 686 TTGCTCCGTAGCGCC TGGCGCCAACAGGTAATCCGCA 687 TAGCGTCGGAACATTCTTCCGACAG 688 TTGCTCAGTAGCACCGTTGATCAGA 689 TTGCTCCGTAGCCTCTGAA 689 TTGCAGCTGGTAGCCTCCGTTTAA 7TTAAACGAGAGCACCGCTATCA 689 TTGCTCCGTAGCCTCCGTTTAA 7TTAAACGAGAGCTACCAGCACAGGCACAGAGCAACAGGTCACCAGAGGCACAACAGGTCACCAGAGGCACAGAGCACAACAGCTTCAGCACAGCACAGAGCACAACAGCTTCACACAGCACAGAGCACAACAGCACACAACAGCTCACACAGCACACAGAGCACACAACAGCTCACACAGCACACAGAGCACACAACAGCACCACACAACAGCACCAC		674		TCCTAACCGAGCGCTTAGCATTTCC	TGGAAATGCTAAGCGCTCGGTTAGG
677 TGATGCTCGCGTGTTTAGTTCACG 678 TTCGGATGACGAGGTTCCATGACGG 679 TATGCGGTGACGAGGTTCCATGACGG 679 TATGCGGTCTACTTCTCGATCGGG 680 TTTGCGAGGCTAGCACACGGTAAA 681 TAACTTAATTACCGCCTCTGGCGCC 682 TGTGACCGCGAACATGTTCCGACAG 682 TGTGACCGCGAACATGTTCCGACAG 683 TTGCGGATCACACGCTTCTAA 684 TTGATAGCGGCTCTTAA 685 TTGCGGAACAAGTTCGCTCTTAA 685 TTGCTGCGAACAGGTAAAA 686 TTGATAGCGGCTCTTAA 686 TTGATAGCGGCAACTTGATCAGA 687 TTGCTGGAACAAGTTCGCCCTCTTAA 688 TTGCTCCGTAACGATTCACTCATA 688 TTGCTCCGTAACGATTCACTCATAG 688 TTGCAGCTGGTAGCCTCCGTTTGA 687 TAGCGTCGCATGACCATCCGTTTGA 688 TTGCAGCTGGTAGCCTCCGTTTGA 689 TTGAACGACGCATGACCACGCATTCAACGAGGCAACTCACGCAGCACAGGCAACAGGCTGTCAA 680 TTGTCAGCTGGACCCTCACTTACAGACCTTTACAGCAGCACCAGGCACATACACGAGGCACACAGCACGCAC		675		TCCCGACCCTAACTCGCATTGAATA	TTATTCAATGCGAGTTAGGGTCGGG
10 678 TTCGGATGACGAGTTTCCATGACGG TCCGTCATGGAAACTCGTCATCCGA 879 TATGCGGTCTACTTTCTCGATCGGG TCCCGATCGAGAAAGTAGACCGCAT 680 TTTGCGAGGCTAAGCACACGGTAAA TTTTTACCGTGTCTTAGCCTCGCAA 681 TAACTTAATTACCGCCTCTGGCGCC TGGCGCCAGAGGCGGAATATAAGTT 682 TGTGACCGCGAACTTGTTCCGACCAG TCTGTCGGAACAAGTTCGCCCGAA 683 TTGCGGATTACCGATTCGTCCTAA TTTAAGAGCGAATCGGTAATCCGCA 684 TTGATAAGGGGGCCACGTTGATCAGA TCTGTCGGACAAGTTCGCCAC 685 TTCGCTCCGTAGCGATTCATCGTAG TCTGACGAGTCACCGAGGGGCCCCTATCA 686 TTGTCAGCTGGAGCACTCGGTTGAT TCTGACAGGAGCGCACCTGACA 687 TAGCGTCGCATGACGCTTCAACTTCTAA TTTAAAACGGAGCCACCTGACAC 688 TTGCACCGCACACAGGCTGTCAA TTTCAAACGGAGCGCACCTACCAC 689 TAGCGTCGCATGACGCTTCACC TGTGCCGTAAGCGTCACCACCTGACAC 690 TGTCGCATTCAGCACA TTTGACAGCCTGTTCCGGTCGTCT 691 TTGATTAGGTGCGGTCCCGTAGTCC TGGCGAAGCCAGTGCAGAATCCAC 692 TAAGGGACCTTGGCTCCGTCGCC TGGCGAAGCCAGTGCAGAATCCGAC 693 TTCAAATGGCCACCGCGTCCGTAGTC TGGACTACGGGACCCCTAACCA 694 TCTCCGACGACCACGCGTCCATTC TGGACTACGGGACCCCACCTAATCA 695 TGGCTATTCCCGTAGAGAACCGCCCTCCACCC 696 TTGGATAACCTCCGTCCT TGAATGACACCGCGTGCCCTTTCA 697 TGACCACCACTGACCCACTGCCT TGCACCCAAGGTCCCTT 698 TTGGATTACCTCATCAC TGCACCACCCCGTCACCCAAGGTTCCTC 699 TCCCCACGCTTCCGCC TGCGGCTCCTTCACCCAAGGTTACCA 699 TCCCACGCTTTCCGACCACCCCCTCACCC 699 TCCCACGCTTTCCGACCACCTGACCC 699 TCCCACGCTTTCCGACCACCTGACC 699 TCCCACGCTTTCCGACCACTGACCT TAAGGCACACCTCCCGTACAGCGGTC 700 TCATTGACACAATGCGGGGACCC TGGGTCCCTGCTAAAACCTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAAGGCACACCCCGTACAGCGGTG 701 TAGCCACACAGGGTTCCAAACC 702 TCAGGATAGACACCACTGACCT TAAGGCACACCCCGTACAGCGGTC 703 TCAAGGTATGGCACACCACTGACCT TAGGACACACCCCGCAACACCC 704 TGGTGTTCGGCCCAAACCC 705 TTTTAGCACAAACCGACCCTCAAC 706 TCAAGGATTAGGCCCAAACCC 707 TCAAGGCACACCCTGACCATAACTCTTCCG 707 TCAAGGCACACCCTGAACCCT 708 TTTTAGCCGCCAAACCCTTCCACCC 706 TTTTAGCACCAATGCTTTCCGACCAAGCCTTTCCGACCAACACC 706 TTTTAGCCACAACCCTTCCACCCCGCAACACCC 707 TCTGGACCAACCCTGCCCAAACCCTTCCAACCTTC 707 TCTGGACCAACCCCGCGCTGAACCC 706 TTTTAGCCACAACCCTGCCCAAACACCT 707 TCTGGACCAACCCCGCCAAACACCC 707 TCTGGACCAACCCCGCGACACCC 707 TCTGGACCAACCCCGCCCGAACACCC 707 TCTGGACCAACCCCGCGAACACCC 707 TCTGGAC		676		TTTGCTTAATGGTGACGCCACGGAT	TATCCGTGGCGTCACCATTAAGCAA
679 TATGCGGTCTACTTTCTCGATCGGG TCCCGATCGAGAAAGTAGACCGCAT 680 TTTGCGAGGCTAAGCACACGGTAAA TTTTACCGTGTCTTAGCCTCGCAA 681 TAACTTAATTACCGCCTCTGGCGCC TGGCGCCAGAGGCGGTAATTAAGTT 682 TGTGACCGCGAACTTGTTCCGACAG TCTGTCGGAACAAGTTCGCGGTCAC 683 TTGCGGATTACCGATTTGCTCTTAA TTTAAGAGCGAATCGGTAATCCGCA 684 TTGATAGGGGGCCACGTTGATCAGA TCTGATCAACGGGGCCCCCTATCA 685 TTCGCTCCGTAGCGATTCATCGTAG TCTACAACGGAGGCCACCTACCA 686 TTGTCAGCTGGTAGCCTCTGTTGA TCAAACGGAGGCTACCAGCTGACA 687 TAGCGTCGCATGACCGTTTGAT TCAAACGGAGGGTCACCAGCTGACA 688 TTGCAGCGACAGGCTTCACA TTTGACAACGGAGGCTACCAGCTGACA 689 TAGCGTCGCATGACGCTTCGCC TGGCCAGCGAGGCCCCCTACCAC 690 TGTCGCATTCTGCACTGGCTTCAA TTTGACAGCCTGTTCGGGCGCC 690 TGTCGCATTCTGCACTGGCTTCGCC TGGCGAAGCCAGTGCACACAGGCTCCCTTTGACTGACCGCACCTACCACGCACCACTACCACGCACCACCACCACCACCACCACCACCACCACCACC		677		TGATGCTCGCCGTGTTTAGTTCACG	TCGTGAACTAAACACGGCGAGCATC
680 TTTGCGAGGCTAAGCACAGGTAAA TTTTACCGTGTGCTTAGCCTCGCAA 681 TAACTTAATTACCGCCTCTGGCGC TGGCGCCAGAGGCGGTAATTAAGTT 682 TGTGACCGCGAACTTGTTCCGACAG TCTGTCGGACAAGTTCGCGGTCAC 683 TTGCGGATTACCGATTCGCTCTTAA TTTAAGAGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGTTCGCGAACAGGCACCGCAACAGGCAACAGGCTGACAACAGGAGCACCACAGAGCACACAGGCTCCGTTTGAACACGGAGGCTACCAGACGCACACAGGCTGCAAACAGGAGCCACCAGACAGGCTGCAAACAGGAACAGGCTGCAAACAGGAACAGGCTGCAAACAGGAACAGGCTGCAACAGGCTGCCAACAGGCACCAGACAGGCTCCGTACGACACAGGCCACCTACACAGCACAGAACAGGCTGCAACAGGCCACCTACACAGCACAGAACAGGCTGCCAACAGGCCACCCAACAGGCCCACCAACAACAGACACAGAACAGACACAGAACAGACACAGAACAGACACAGAACAGACACACACAGAACAGACACACACACACACACACACACACACACACACACACACAC	10	678		TTCGGATGACGAGTTTCCATGACGG	TCCGTCATGGAAACTCGTCATCCGA
681 TAACTTAATTACCGCCTCTGGCGCC TGGCGCCAGAGGCGGTAATTAAGTT 682 TGTGACCGCGAACTTGTTCCGACAG TCTGTCGGAACAAGTTCGCGGTCAC 683 TTGCGGATTACCGATTCGCTCTTAA TTTAAGAGCGAATCGGTAATCCGCA 684 TTGATAGGGGGCCACGTTGATCAGA TCTGATCAACGTGGCCCCCTATCA 685 TTCGCTCCGTAGCGATTCATCGTAG TCTACGATGAATCGCTACGGAGCGA 686 TTGTCAGCTGGTAGCCTCCGTTTGA TTCAAACGTGGCCCCCTATCA 687 TAGCGTCGCATGACCCTCCGTTTGA TTCAAACGGAGCTACCAGCTGACA 687 TAGCGTCGCATGACCCTTACGGCAC TGTGCCGTAAGCGTCATCACGGACCT 15 TCGTGTAGGGGTCCCGTGTCAA TTTGACAGCACTGATGCGACGCT 15 TCGTGCATTCTGCACTGGCTTCCAC TTTGACAGCACCGGACCCCTCACACG 690 TGTCGCATTCTGCACTGGCTTCCCC TGGCGAACCCAGCAGAATGCGAC 691 TTGATTAGGTGCGGTCCCTTAGTCC TGGACACCGCACCCAGCACCACCAGCACCACCAGCACCAGCACCAC		679		TATGCGGTCTACTTTCTCGATCGGG	TCCCGATCGAGAAAGTAGACCGCAT
15 1 TITALAGATEGACAGATTCGCTCTTAA TITAAGAGCGAATCGGTAATCCGCA 684 TITGATAGGGGGCCACGTTGATCAGA TICTGATCAACGTGGCCCCCTATCA 685 TITCGCTCCGTAGCGATTCACTCGTAG TCTACAACGTGGCCCCCTATCA 686 TITGTCAGCTGGTAGCCTCCGTTTGA TTCAAACGTGGCCCCCTATCA 687 TAGCGTCGCATGACCGTTCAGGCAC TGTGCCGTAGCGAGCGA 687 TAGCGTCGCATGACGCTTACGGCAC TGTGCCGTAGCGTCACGCACCGCTGACACGCTGACACGCTGACACGCTGACACGCTGACACGCTGACACGCTGACACGCTCACGCCCCGCACCCGCACCGCACACAGGCTGTCAA TTTGAACAGCCTGATGCGCTCCT 15 TCGTGTAGGGGTCCCGTGCTCAA TTTGACAGCCCTGTCGGTCCCCTC 690 TGTCGCATTCTGCACTGCCTTCCAC TGGCCGAACCCGGACCCCTAACACG 691 TTGATTAGGTGCGGTCCCGTAGTCC TGGCCGAACCCACCACCACACACGGAATGCCAC 692 TAAGGGACCTTGGGTCCCGTAGTCC TGGACTACCGAACCCCTAACAC 693 TTCAAATGGCCCACCGCGTGTCATTC TGAATGACACCGCGTGCCCTTTTGA 694 TCTCCGACGACCAATAAATAGCCGC TGCGGCTACTCACCCAAGGTCCCTT 695 TGGCTATTCCCGTAGAGAGCGTCCA TTGGACGACCGCACCACTAACAC 696 TTGGATAACCTCTCGGTCCATCCAC TGCGGACGACCGACACCATTACCA 697 TGACCGCTGTACGGGAGAGCTCCA TGGGACGACCACACACACCGCGTCCCT 699 TCCCACGCTTTCCGACCACTGACCT TAAGGCACACTCCCGTAAACTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAAGGCACACTCCCGTAAAACTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGCTCGAACACCTCCCGTACACGTGGCT 700 TCATTGACACATGCGGGGACCCTTCCAC TGGGTCCCTGCTAAAACTCTGTGGC 701 TAGCCACTCGACAGGGTTCCAAACC TGCTTTGGACCCCCGCATTGGTCCAGGGCT 702 TCAAGGATGAGCAAAGCGACCTCCCA TGCGACACCATCCCTG 703 TCAAGGTATGGTCTGGGGCCTAAACT 704 TGGTGTTCGGCCCTAAACTCTTCCG TCCGAAACACCTTTGCTCATCCTG 705 TTTTAGTCGGCCCTAAACTCTTTCGGCCCCAAGAGGTTCGACCCT 706 TCACACGTTTCCGACCACCTGACC TGCCACAGGGTCCGACCATACCTTTC 707 TCACACCGTTTCCGACCACCCTGAAC TGCTCACCACGGGTCCGAACACC 706 TTTTAGTCGGCCCTAAACTCTTTCGGCCCCAACACCATCCCTTG 707 TCTGGACGACCCTGTGCCAAACCCTGCACCATCCCTTG 707 TCTGGACGACCCTGTGCCAAACCCCTGCACCATCCCTTG 707 TCTGGACGACCCTGACC TGTCCACCC TGTCCACAGCGTCCGACCATACCTTTCCGCCCCAAAACCCCTGCACCATCCCTTTCCGCCCCAAAACCCCTGCCACCACCATACCTTTCCGCCCCAAAACCCCTGCACCATCCCTTTCCGCCCCAAAACCCCTGCACCACCACCATACCTTTCCGCCCCAAAACCCCTGCACCACCATACCTTTCCGCCCCAAAACCCCTGCACCACCACCACCATACCTTCCACCCCCCAAACCCCTGCACCACCACCACCACCACCACCACCACCACCACCACCAC		680		TTTGCGAGGCTAAGCACACGGTAAA	TTTTACCGTGTGCTTAGCCTCGCAA
15 683 TTGCGGATTACCGATTCGCTCTTAA TTTAAGAGCGAATCGGTAATCCGCA 684 TTGATAGGGGGCCACGTTGATCAGA TTCTGATCAACGTGGCCCCCTATCA 685 TTCGCTCCGTAGCGATTCATCGTAG TCTACGATGAATCGCTACGGAGCGA 686 TTGTCAGCTGGTAGCCTCCGTTTGA TTCAAACGGAGGCTACCAGCTGACA 687 TAGCGTCGCATGACGCTTACGGCAC TGTGCCGTAAGCGTCATGCGACGCT 14 TAGACGCACCGCAACAGGCTGCAA TTTGACAGCCTGTTGCGGTGCGTCT 15 TCGTGTAGGGGTCCCGTGCTAA TTTGACAGCACGGGACCCCTACACG 690 TGTCGCATTCTGCACTGGCTTCCAC TGGGCAACCAGGGACCCCTACACG 691 TTGATTAGGTGCGGTCCCGTTAGTCC TGGACTACGAGCACCAGCGAATTCAA 692 TAAGGGACCTTGGGTGACAGCTTCGCC TGGACTACCACCAGCGCACCCTACACC 693 TTCAAATGGCCACCGCGTGTCATTC TGAATGACACCCCGGTGCCCATTTGA 694 TCTCCGACGACCAATAAATAGCCGC TGCGGCTATTTTATTGGTCGTCGGGAG 695 TGGCTATTCCCGTAGAGAGCGTCCA TTGGACGCTCTCTACAGGAGATACCA 696 TTGGATAACCTCTCGGTCCATCCAC TGTGGACGCCCGAGAGGTTACCA 697 TGACCGCTGTACGGGAGTGTCCTT TAAGGCACCACCGAGAGGTTACCA 698 TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCCTGCAAAACCTCCCGTACAGCGGTG 699 TCCCACGCTTTCCGGCCACTGACT TAAGGCACACTCCCGTACAGCGGTG 700 TCATTGACACAATGCGGGGACCC TGGGTCCCTTCTAAAACCTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACC TGGGTCCCTGCAAAACCTCTGTGGC 701 TAGCCACCTCGACAAGCGTTCCAC TGGGTCCCTGCAAAACCTCTGGGCC 702 TCAGGATGACCAAGGGTTCCAACC TGCTTTGGAACCCTGTCCAATGCT 703 TCAAGGTATGGTCTGGGGCCTAAAC 704 TGGTGTTCGGCCCAAACCTTCCAC TGGGACCCCAGACCATACCTTG 705 TTTTAGTCGGCCCAAACCTTTCCG TCCAAAACGTTTAGCCCCAAACCACCC 705 TTTTAGTCGGCCCAAACCCTTTCCGACCACGGGTCCGGAAACCCTGTCGAACACC 706 TCACACGTTTCCGACCACCTGAACC TGCTTAGGCCCCAGACCATACCTTG 707 TCTGGACGACCACTGGCCTTAACCTTTCCGACCACGGGTCCGGAAACCGTGCGACACCC 707 TCTGGACGACCACTGCCTGAACC TGTTCAGGCCCCAGACCATACCTTG 707 TCTGGACGACCACTGCCTGAACC TGTTCAGGCCCCAGACCATACCTTG 707 TCTGGACGACCACTGCCTTCCTCTTCCTGTAC 708 TTTTCACAATCCGCCCGAAAACTGCCC TGTGCAGAACCCAGGGTCCGACCACCACCC 705 TTTTCACAATCCGCCGAAAACTGCTTCCTCTTCCGACCAGGGTCCGACCACCC 706 TCTTCGACCACCACCCTGTCGAACCCTGTCGAAACCCTGTCGAAACCCTGTCGAAACCCTGTCGAAACCCTGTCGAAACCCTGTCGACACCCCAGACCACCCCAGACCACCCCAGACCACCCCAGACCACC	1	681		TAACTTAATTACCGCCTCTGGCGCC	TGGCGCCAGAGGCGGTAATTAAGTT
684 TTGATAGGGGGCCACGTTGATCAGA TTCTGATCAACGTGGCCCCCTATCA 685 TTCGCTCCGTAGCGATTCATCGTAG TCTACGATGAATCGCTACGGAGCGA 686 TTGTCAGCTGGTAGCCTCCGTTTGA TTCAAACGGAGGCTACCAGCTGACA 687 TAGCGTCGCATGACGCTTACGGCAC TGTGCCGTAAGCGTCATCAGCGACCGCTACCAGCTGACCACCGCTACCGCTGCCACCGCTACCGCCCCCTTTCAACGCCCCTCGTTCAACCGCACCCTCACCCCCCCC		682		TGTGACCGCGAACTTGTTCCGACAG	TCTGTCGGAACAAGTTCGCGGTCAC
685 TTCGCTCCGTAGCGATTCATCGTAG 686 TTGTCAGCTGGTAGCCTCCGTTTGA 687 TAGCGTCGCATGACGCTTACGGCAC 687 TAGCGTCGCATGACGCTTACGGCAC 687 TAGCGTCGCATGACGCTTACGGCAC 687 TAGCGTCGCATGACGCTTACGGCAC 687 TAGCGTCGCATGACGCTTACGGCAC 687 TAGCGTCGCATGACGCTTACAGCAC 688 TTTGACAGCCTGTTGCAC 690 TGTCGCATTCTGCACTGGCTTCAC 690 TGTCGCATTCTGCACTGGCTTCGCC 691 TTGATTAGGTGCGGTCCCGTAGTCC 692 TAAGGGACCTTGGGTGCAC 693 TTCAAATGGCCACCGCGAGAC 694 TCTCCGACGGTGCCACC 695 TGGCTATTCCCGTCACTTC 696 TTCACATGCCACCCCAAGGTCCCTT 696 TTGGACTACCGCGTGCTCATTC 697 TGACCGCTGTCATTC 698 TGGCTATTCCCGTAGAGACCGCCTCCACCCAAGGTCCCTT 699 TGACCGCTGTCACCAC 699 TGGCTATTCCCGTAGAGAGCCGCC 699 TGCCACAGAGTTTAGCAGGGACCC 699 TGCCACAGAGTTTAGCAGGGACCC 699 TCCCACGCTTTCCGGCCCTT 699 TCCCACGCTTTCCGACCACTGACCT 700 TCATTGACACAATGCGGGGACCC 700 TCATTGACACAATGCGGGGACCCT 701 TAGCCACTGGACGACCACTGACCT 702 TCAGGGATGACCACTGCAC 703 TCAAGGTATGGTCCAAAGC 704 TGGTGTTCGGCCCAAGCC 705 TTTTAGTCGGCCCAAACCCTCCCA 706 TCACACGTTTCGGCCCTAAACTCTCCA 707 TCAGGGACCCCTGGCCTAACC 708 TTTTAGTCGGCCCAACCCCTGACCT 709 TCACACGTTTCCGACCACTGACCT 700 TCACACGTTTCCGACCACTGCCC 701 TTTTAGTCGGCCCCAACCCTCCCACCCAGCCCTTTCCCTCCTCCACCCCCCCC	15	683		TTGCGGATTACCGATTCGCTCTTAA	TTTAAGAGCGAATCGGTAATCCGCA
686 TTGTCAGCTGGTAGCCTCCGTTTGA TTCAAACGGAGGCTACCAGCTGACA 687 TAGCGTCGCATGACGCTTACGGCAC TGTGCCGTAAGCGTCATGCGACGCT 14 TAGACGCACCGCAACAGGCTGTCAA TTTGACAGCCTGTTGCGGTGCGTCT 15 TCGTGTAGGGGTCCCGTGTCAA TTTGACAGCACGGGACCCCTACACG 690 TGTCGCATTCTGCACTGGCTTCGCC TGGCGAAGCCAGTGCAGAATGCGAC 691 TTGATTAGGTGCGGTCCCGTAGTCC TGGACTACCGACGCGACCCCTACACG 692 TAAGGGACCTTGGGTGACGGCGAGA TTCTCGCCGTCACCCAAGGTCCCTT 25 693 TTCAAATGGCCACCGCGTGTCATTC TGAATGACACGCGGTGCCATTTGACGGACCCAACGGACCAATAAATA		684		TTGATAGGGGGCCACGTTGATCAGA	TTCTGATCAACGTGGCCCCCTATCA
20 14 TAGACGCACGCAACAGGCTGTCAA TTTGACAGCCTGTTGCGACGGTCT 15 TCGTGTAGGGGTCCCGTGTCAA TTTGACAGCCTGTTGCGGTGCGTCT 15 TCGTGTAGGGGTCCCGTGCTGCAA TTTGACAGCCAGGGACCCCTACACG 690 TGTCGCATTCTGCACTGGCTTCGCC TGGCGAAGCCAGTGCAGAATGCGAC 691 TTGATTAGGTGCGGTGCCGTAGTCC TGGACTACGGGACCGCACCTAATCA 692 TAAGGGACCTTGGGTGACGGCGAGA TTCTCGCCGTCACCCAAGGTCCCTT 693 TTCAAATGGCCACCGCGTGTCATTC TGAATGACACGCGGTGGCCATTTGA 694 TCTCCGACGACCAATAAATAGCCGC TGCGGCTATTTATTGGTCGTCGGAG 695 TGGCTATTCCCGTAGAGAGCGTCCA TTGGACGCTCTCTACGGGAATAGCC 696 TTGGATAACCTCTCGGTCCATCCAC TGTGGACGACCGAGAGGTTATCCA 697 TGACCGCTGTACGGGAGTGTGCCTT TAAGGCACACCTCCGTACAGCGGTC 698 TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCATCAAAACTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTCGGAAAACCTGTGGCC 700 TCATTGACACAATGCGGGGACTGAT TATCAGTCCCCGCATAAACCTTGTGGC 701 TAGCCACTCGACAAGCGTTCCAAAGC TGCTTTGGACGCCTTTCAATGC 702 TCAGGATGACCAAGCGTTCCAAAGC TGCTTTGGACCCCTGTCAAGTGGCT 703 TCAAGGTATGGTCTGGGGCCTAAGC TGCTTAGGCCCCAGACCATACCTTG 704 TGGTGTTCGGACCACTGACCT TGGAGAGTCGCTTTGCTCATCTG 705 TTTTAGTCGGACCACTGGCCTAACC TGCGAAAGAGTTTAGGCCGAAACACC 705 TTTTAGTCGGACCACTGGCCTTTCCGACAGGGTCCGACTAAA 706 TCACACGTTTCCGACCACGCTGAC TGTTCAGGCTGGAAACCTTGG 707 TCTGGACGAACTGGCTTCCTCCTTCCTGCCCGCATTTTCCGCCGAAACCTTCCAGCTTCCACCTTCCAGCTCCACCACCATCCCTTCCACCTTCCACCTTCCACCCCCACACCATACCTTTCCGACCACCCTTCCACCTTTCCGACACCCTTCCACCTTTCCGACACCCTTCCACCTTTCCGACACCCTTCCACCTTTCCGACACCCTTCCACCTTTCCGACACCCTTCCACCTTTCCGACACCCTTCCACCTTTCCGACCACCCTTCCACCTTTCCGACACCCTTCCACCTTTCCGACCACCCTTCCACCTTTCCGACCACCCTTCCACCTTTCCGACCACCCTTCCACCTTTCCGACCACCCTTCCACCTTTCCGACCACCCTTCCACCTTTCCGACCACCCTTCCACCTTTTCCGACCACACCCTTCCACCTTTTCCGACCACCCTTCCACCTTTTCCGACCACCACCCTTCCACCTTTTCCGACCACACCCTTCCACCTTTTTCCGACCACACCCTTCCACCTTTTTCCGACCACACCCTTCCACCTTTTTCCGACCACACCCTTCCACCTTTTCCGACCACACCCTTCCACCTTTTTCCGACCACACCCTTCCACCTTTTTCCGACCACACCCTTCCACCTTTTTCCGACCACACCCTTCCACCTTTTTCCGACCACACCCTTCCACCTTTTTCCGACCACACCCTTCCACCTTTTTCCGACCACACCCTTCACCTTTTTCCGACCACACCCTTCACCTTTTTCCGACCACACCCTTCACCTTTTTTCCGACCACACCCTTCACCTTTTTTCCACCCCCACACCATTCCACCTTTTTT		685		TTCGCTCCGTAGCGATTCATCGTAG	TCTACGATGAATCGCTACGGAGCGA
20 14 TAGACGCACCGCAACAGGCTGTCAA TTTGACAGCCTGTTGCGGTGCGTCT 15 TCGTGTAGGGGTCCCGTGCTGTCAA TTTGACAGCACGGGACCCCTACACG 690 TGTCGCATTCTGCACTGGCTTCGCC TGGCGAAGCCAGTGCAGAATGCGAC 691 TTGATTAGGTGCGGTCCCGTAGTCC TGGACTACCGGGACCCCCAACTCA 692 TAAGGGACCTTGGGTGACGGCGAGA TTCTCGCCGTCACCCAAGGTCCCTT 692 TAAGGGACCTTGGGTGACGGCGAGA TTCTCGCCGTCACCCAAGGTCCCTT 694 TCTCCGACGACCACCGCGTGTCATTC TGAATGACACGCGGTGGCCATTTGA 695 TGGCTATTCCCGTAGAGAGCGTCCA TTGGACGCTCTCTACGGGAATAGCC 696 TTGGATAACCTCTCGGTCCATCAC TGTGGATGACCGGAGAGGTTATCCA 697 TGACCGCTGTACGGGAGTGTGCTT TAAGGCACACTCCCGTACAGCGGTC 698 TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCCTGCAAAACTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGTCGGAAAGCCTGGC 700 TCATTGACACAATGCGGGGACTGAT TATCAGTCCCCGCATTGTGTCAATG 701 TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGACCCTGTCAGTGGCT 702 TCAGGATGACCAAAGCGACTCTCCA TTGGAGAGCCCCAGACCATACCTTG 703 TCAAGGTATGGTCTGGGGCCTAAGC TGCTTTAGGCCCCAGACCATACCTTG 704 TGGTGTTCGGCCCTAAACTCTTCCG TCCGAAAGAGTTTAGGCCGAACACC 705 TTTTAGTCGGACCACTGGCATTC TGAATTGCCACAGGGTCCGACTAAA 706 TCACACGTTTCCGACCACCCTGACC TGTTCAGGCTGGAAACCTGTG 707 TCTGGACGAACCCTGGCTTCCTCCTGTAC TGTTCAGGCTGGAAACCTGTG 707 TCTGGACGAACTGCCTTCCTCGTAC TGTTCAGGCTGGAAACCTGTCCAG 40 T08 TITCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGCAG 40 TITTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGGATTGTGCAG 40 TITTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGGATTGTGCAG		686		TTGTCAGCTGGTAGCCTCCGTTTGA	TTCAAACGGAGGCTACCAGCTGACA
15 TCGTGTAGGGGTCCCGTGCTGTCAA  690 TGTCGCATTCTGCACTGGCTTCGCC TGGCGAAGCCAGTGCAGAATGCGAC  691 TTGATTAGGTGCGGTCCCGTAGTCC TGGACTACCGCACCGC		687	_	TAGCGTCGCATGACGCTTACGGCAC	TGTGCCGTAAGCGTCATGCGACGCT
690 TGTCGCATTCTGCACTGGCTTCGCC TGGCGAAGCCAGTGCAGAATGCGAA 691 TTGATTAGGTGCGGTCCCGTAGTCC TGGACTACCGCACCGC	20		14	TAGACGCACCGCAACAGGCTGTCAA	TTTGACAGCCTGTTGCGGTGCGTCT
TIGATTAGGTGCGGTCCCGTAGTCC  692 TAAGGGACCTTGGGTGACGGCGAGA TTCTCGCCGTCACCCAAGGTCCCTT  693 TTCAAATGGCCACCGCGTGTCATTC TGAATGACACGCGGTGGCCATTTGA  694 TCTCCGACGACCAATAAATAGCCGC TGCGGCTATTTATTGGTCGTCGGAG  695 TGGCTATTCCCGTAGAGAGCGTCCA TTGGACGCTCTCTACGGGAATAGCC  696 TTGGATAACCTCTCGGTCCATCCAC TGTGGATGACCGAGAGGGTTATCCA  697 TGACCGCTGTACGGGAGTGTGCCTT TAAGGCACACTCCCGTACAGCGGTC  698 TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCCTGCTAAAACTCTGTGGC  699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGTCGGAAAACCGTGGC  700 TCATTGACACAATGCGGGGACTGAT TATCAGTCCCCGCATTGTGTCAATG  701 TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTTTGCTCATCCTG  702 TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGTCGCTTTGCTCATCCTG  704 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC  705 TTTTAGTCGGCCCTAAACTCTTTCCG TCCGAAAGAGTTTAGGCCGAAACACC  706 TCACACGTTTCCGACCAGCCTGAAC  TGTTCAGGCTGGGAAACCGTGCAAAACCTGTCCTGAAACCGTTGCTCAACCTTG TCTGGACGACCATCGACCAGCCTGAAC  706 TCACACGTTTCCGACCAGCCTGAAC  TGTTCAGGCTGGGAAACCGTGCAAAACTTCCTGAGAGAAACGGAAACCGCTGCGACAAACGCCTGCACCAAACGCCTGCACCAAACTCCTGCACCAACCCTGCACCAAACCGCTTCCAACCCTGCACCAACCCTGCACCAACCCTGTCCGACCAACCCTGTCCGACCAACCCTGTCGACCAACCCTGTCCGACCAACCCCTGTCGACCAACCCTGTCCACCAACCCTGCACCAACCCTGTCCACCAACCCTGCACCAACCCTGTCCACCCTGCACCAACCCTGACCAACCCCTGTGCCACCAACCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAAAACTGACCCTGACCAAAACTGACCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCAACACCCCTGACCACACCCCTGACCACCCCAACACCCCTGACCACCCCAACACCCCTG			15	TCGTGTAGGGGTCCCGTGCTGTCAA	TTTGACAGCACGGGACCCCTACACG
TAAGGGACCTTGGGTGACGGCGAGA TTCTCGCCGTCACCCAAGGTCCCTT  693 TTCAAATGGCCACCGCGTGTCATTC TGAATGACACGCGGTGGCCATTTGA 694 TCTCCGACGACCAATAAATAGCCGC TGCGGCTATTTATTGGTCGTCGAGG 695 TGGCTATTCCCGTAGAGAGCGTCCA TTGGACGCTCTCTACGGGAATAGCC 696 TTGGATAACCTCTCGGTCCATCCAC TGTGGATGGACCGAGAGGTTATCCA 697 TGACCGCTGTACGGGAGTGTGCCTT TAAGGCACACTCCCGTACAGCGGTC 698 TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCCTGCTAAAACTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGTCGGAAAGCGTGGC 700 TCATTGACACAATGCGGGGACTGAT TATCAGTCCCCGCATTGTGTCAATG 701 TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTGTCGAGTGGCT 702 TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGCTGTGTCATCCTG 704 TGGTGTTCGGCCCTAAACTCTTCGG TCCGAAAGAGTTTAGGCCGAACACC 705 TTTTAGTCGGCCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC 706 TCACACGTTTCCGACCAGCCTGAAC 707 TCTGGACGACCAGCCTGAAC 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA 40 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		690		TGTCGCATTCTGCACTGGCTTCGCC	TGGCGAAGCCAGTGCAGAATGCGAC
25 693 TTCAAATGGCCACCGCGTGTCATTC TGAATGACACGCGGTGGCCATTTGA 694 TCTCCGACGACCAATAAATAGCCGC TGCGGCTATTTATTGGTCGTCGGAG 695 TGGCTATTCCCGTAGAGAGCGTCCA TTGGACGCTCTCTACGGGAATAGCC 696 TTGGATAACCTCTCGGTCCATCCAC TGTGGATGGACCGAGAGGTTATCCA 697 TGACCGCTGTACGGGAGTGTGCCTT TAAGGCACACTCCCGTACAGCGGTC 698 TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCCTGCTAAAACTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGTCGGAAAGCGTGGC 700 TCATTGACACAATGCGGGGACTGAT TATCAGTCCCCGCATTGTGTCAATG 701 TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTGTCGAGTGGCT 702 TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGTCGCTTTGCTCATCCTG 703 TCAAGGTATGGTCTGGGGCCTAAGC TGCTTAGGCCCCAGACCATACCTTG 704 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC 705 TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA 706 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGAAACCGTGTG 707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		691		TTGATTAGGTGCGGTCCCGTAGTCC	TGGACTACGGGACCGCACCTAATCA
694 TCTCCGACGACCAATAAATAGCCGC TGCGGCTATTTATTGGTCGTCGGAG 695 TGGCTATTCCCGTAGAGAGCGTCCA TTGGACGCTCTCTACGGGAATAGCC 696 TTGGATAACCTCTCGGTCCATCCAC TGTGGATGACCGAGAGGTTATCCA 697 TGACCGCTGTACGGGAGTGTGCCTT TAAGGCACACTCCCGTACAGCGGTC 698 TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCCTGCTAAAACTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGTCGGAAAGCGTGGC 700 TCATTGACACAATGCGGGGACTGAT TATCAGTCCCCGCATTGTGTCAATG 701 TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTGTCGAGTGGCT 702 TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGTCGCTTTGCTCATCCTG 704 TGGTGTTCGGCCTAAACTCTTCGG TCCGAAAGAGTTTAGGCCGAACACC 705 TTTTAGTCGGCCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC 706 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGAAACGTGTG 707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		692		TAAGGGACCTTGGGTGACGGCGAGA	TTCTCGCCGTCACCCAAGGTCCCTT
695 TGGCTATTCCCGTAGAGAGCGTCCA TTGGACGCTCTCTACGGGAATAGCC 696 TTGGATAACCTCTCGGTCCATCAC TGTGGATGACCGAGAGGTTATCCA 697 TGACCGCTGTACGGGAGTGTGCCTT TAAGGCACACTCCCGTACAGCGGTC 698 TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCCTGCTAAAACTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGTCGGAAAGCGTGGC 700 TCATTGACACAATGCGGGGACTGAT TATCAGTCCCGCATTGTGTCAATG 701 TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTGTCGAGTGGCT 702 TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGCCCTGTCGAGTGGCT 703 TCAAGGTATGGTCTGGGGCCTAAGC TGCTTAGGCCCCAGACCATACCTTG 704 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC 705 TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA 706 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG 707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGGATTGTGAA	25	693		TTCAAATGGCCACCGCGTGTCATTC	TGAATGACACGCGGTGGCCATTTGA
696 TTGGATAACCTCTCGGTCCATCCAC TGTGGATGGACCGAGAGGTTATCCA 697 TGACCGCTGTACGGGAGTGTGCCTT TAAGGCACACTCCCGTACAGCGGTC 30 698 TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCCTGCTAAAACTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGTCGGAAAGCGTGGC 700 TCATTGACACAATGCGGGGACTGAT TATCAGTCCCCGCATTGTGTCAATG 701 TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTGTCGAGTGGCT 702 TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGCCCTGTCGAGTGGCT 704 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC 705 TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA 706 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGAAAACGTGTG 707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCAGAATTGTGAA		694		TCTCCGACGACCAATAAATAGCCGC	TGCGGCTATTTATTGGTCGTCGGAG
TGACCGCTGTACGGGAGTGTGCCTT  TAAGGCACACTCCCGTACAGCGGTC  698 TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCCTGCTAAAACTCTGTGGC  699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGTCGGAAAGCGTGGC  700 TCATTGACACAATGCGGGGACTGAT TATCAGTCCCCGCATTGTGTCAATG  701 TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTGTCGAGTGGCT  702 TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGTCGCTTTGCTCATCCTG  703 TCAAGGTATGGTCTGGGGCCTAAGC TGCTTAGGCCCCAGACCATACCTTG  704 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC  705 TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA  706 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG  707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG  40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGGATTGTGAA		695		TGGCTATTCCCGTAGAGAGCGTCCA	TTGGACGCTCTCTACGGGAATAGCC
TGCCACAGAGTTTTAGCAGGGACCC TGGGTCCCTGCTAAAACTCTGTGGC 699 TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGTCGGAAAGCGTGGC 700 TCATTGACACAATGCGGGGGACTGAT TATCAGTCCCCGCATTGTGTCAATG 701 TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTGTCGAGTGGCT 702 TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGTCGCTTTGCTCATCCTG 703 TCAAGGTATGGTCTGGGGCCTAAGC TGCTTAGGCCCCAGACCATACCTTG 704 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC 705 TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA 706 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG 707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		696		TTGGATAACCTCTCGGTCCATCCAC	TGTGGATGGACCGAGAGGTTATCCA
TCCCACGCTTTCCGACCACTGACCT TAGGTCAGTGGTCGGAAAGCGTGGC TOO TCATTGACACAATGCGGGGACTGAT TATCAGTCCCCGCATTGTGTCAATG TOO TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTGTCGAGTGGCT TOO TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGTCGCTTTGCTCATCCTG TOO TCAAGGTATGGTCTGGGGCCTAAGC TGCTTAGGCCCCAGACCATACCTTG TOO TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC TOT TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA TOO TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG TOT TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG TOS TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		697		TGACCGCTGTACGGGAGTGTGCCTT	TAAGGCACACTCCCGTACAGCGGTC
TCATTGACACAATGCGGGGACTGAT TATCAGTCCCCGCATTGTGTCAATG TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTGTCGAGTGGCT TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGTCGCTTTGCTCATCCTG TCAAGGTATGGTCTGGGGCCTAAGC TGCTTAGGCCCCAGACCATACCTTG TO4 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC TO5 TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA TO6 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA	30	698		TGCCACAGAGTTTTAGCAGGGACCC	TGGGTCCCTGCTAAAACTCTGTGGC
701 TAGCCACTCGACAGGGTTCCAAAGC TGCTTTGGAACCCTGTCGAGTGGCT 702 TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGTCGCTTTGCTCATCCTG 703 TCAAGGTATGGTCTGGGGCCTAAGC TGCTTAGGCCCCAGACCATACCTTG 704 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC 705 TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA 706 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG 707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		699		TCCCACGCTTTCCGACCACTGACCT	TAGGTCAGTGGTCGGAAAGCGTGGG
TCAGGATGAGCAAAGCGACTCTCCA TTGGAGAGTCGCTTTGCTCATCCTG TCAAGGTATGGTCTGGGGCCTAAGC TGCTTAGGCCCCAGACCATACCTTG TO4 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC T05 TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA T06 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		700		TCATTGACACAATGCGGGGACTGAT	TATCAGTCCCCGCATTGTGTCAATG
TCAAGGTATGGTCTGGGGCCTAAGC TGCTTAGGCCCCAGACCATACCTTG TO4 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA TO6 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		701		TAGCCACTCGACAGGGTTCCAAAGC	TGCTTTGGAACCCTGTCGAGTGGCT
704 TGGTGTTCGGCCTAAACTCTTTCGG TCCGAAAGAGTTTAGGCCGAACACC 705 TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA 706 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG 707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		702		TCAGGATGAGCAAAGCGACTCTCCA	TTGGAGAGTCGCTTTGCTCATCCTG
705 TTTTAGTCGGACCCTGTGGCAATTC TGAATTGCCACAGGGTCCGACTAAA 706 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG 707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA	35	703		TCAAGGTATGGTCTGGGGCCTAAGC	TGCTTAGGCCCCAGACCATACCTTG
706 TCACACGTTTCCGACCAGCCTGAAC TGTTCAGGCTGGTCGGAAACGTGTG 707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA	. ,	704		TGGTGTTCGGCCTAAACTCTTTCGG	TCCGAAAGAGTTTAGGCCGAACACC
707 TCTGGACGAACTGGCTTCCTCGTAC TGTACGAGGAAGCCAGTTCGTCCAG 40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		705		TTTTAGTCGGACCCTGTGGCAATTC	TGAATTGCCACAGGGTCCGACTAAA
40 708 TTTCACAATCCGCCGAAAACTGACC TGGTCAGTTTTCGGCGGATTGTGAA		706		TCACACGTTTCCGACCAGCCTGAAC	TGTTCAGGCTGGTCGGAAACGTGTG
	1	707	_]	TCTGGACGAACTGGCTTCCTCGTAC	TGTACGAGGAAGCCAGTTCGTCCAG
709 TAACAGGATATCCGCGATCACGACA TTGTCGTGATCGCGGATATCCTGTT	40	708		TTTCACAATCCGCCGAAAACTGACC	TGGTCAGTTTTCGGCGGATTGTGAA
		709		TAACAGGATATCCGCGATCACGACA	TTGTCGTGATCGCGGATATCCTGTT

	710	TTACGTCGGATCCATTGCGCCGAGT	TACTCGGCGCAATGGATCCGACGTA
	711	TCATGGATCTCTCGGTTTGATCGCC	TGGCGATCAAACCGAGAGATCCATG
	712	TAGCCAGGCGCGTATATACGCTCGG	TCCGAGCGTATATACGCGCCTGGCT
	713	TATTTGGCACGTGTCGTGCCATGTT	TAACATGGCACGACACGTGCCAAAT
5	714	TCCGCGTTGCACCACTTTGAGGTGC	TGCACCTCAAAGTGGTGCAACGCGG
	715	TTTGGACGTGACAAGCATGGCGCTC	TGAGCGCCATGCTTGTCACGTCCAA
	716	TCTGAATCGCGCAAGTAAATGGGGG	TCCCCATTTACTTGCGCGATTCAG
	717	TGATAAGGTCCACCAGATTGCGCGC	TGCGCGCAATCTGGTGGACCTTATC
	718	TCTAACAATTGCCAACCGGGACGGC	TGCCGTCCCGGTTGGCAATTGTTAG
10	719	TGGTAACCTGGGTGCTTGCAGGTTA	TTAACCTGCAAGCACCCAGGTTACC
	720	TATCGGAGCCACCATTCGCATTGGG	TCCCAATGCGAATGGTGGCTCCGAT
	721	TGTGAACTGGCTTGCCCCAGGATTA	TTAATCCTGGGGCAAGCCAGTTCAC
	722	TAGGCGATAGCATGGTCCCATATGA	TTCATATGGGACCATGCTATCGCCT
	723	TAACGGTATCGTGGCTAATGCACGA	TTCGTGCATTAGCCACGATACCGTT
15	724	TAGTAGTGGTCCTCCAGATCGGCAA	TTTGCCGATCTGGAGGACCACTACT
	725	TCCGTTGAATTGGACGGGAGGTTAG	TCTAACCTCCCGTCCAATTCAACGG
	726	TGCATAAGTGCGGCATCGCGAAGGG	TCCCTTCGCGATGCCGCACTTATGC
	727	TCGACAAGATGCAGCTGCTACATGC	TGCATGTAGCAGCTGCATCTTGTCG
	728	TTCGCAGTGATTCCCGACCGATAAG	TCTTATCGGTCGGGAATCACTGCGA
20	729	TCAAGGCGAGTCCACTCGAGGGGAC	TGTCCCCTCGAGTGGACTCGCCTTG
	730	TGCAACTTGCACGGCATAAGTGGCC	TGGCCACTTATGCCGTGCAAGTTGC
	731	TTCCGAGCTTGACGTTCGCGACGTC	TGACGTCGCGAACGTCAAGCTCGGA
	732	TAGCGCTGGGCTGTGCCATCTC	TGAGATGGCAGCACAGCCCAGCGCT
	733	TTTCATGTCGCTGAGTAACCCTCGC	TGCGAGGGTTACTCAGCGACATGAA
25	734	TCGAACCGCTAATGCCCATTGTCAG	TCTGACAATGGGCATTAGCGGTTCG
	735	TCACGGAAGGTGGGACAAATCGCCG	TCGGCGATTTGTCCCACCTTCCGTG
	736	TCACAGATGGAGACAAACGCGCCTT	TAAGGCGCGTTTGTCTCCATCTGTG
	737	TTTTTCGCAACTCGCTCCATAACCC	TGGGTTATGGAGCGAGTTGCGAAAA
	738	TACGTTACGTTTCCGGCGCCTCTAA	TTTAGAGGCGCCGGAAACGTAACGT
30	. 739	TTATCGGATTGCGTGGGTTTCAATC	TGATTGAAACCCACGCAATCCGATA
	740	TCTTCCACAATTGTCTGCGACGCAC	TGTGCGTCGCAGACAATTGTGGAAG
	741	TTGCACAAAGGTATGGCTGTCCGGC	TGCCGGACAGCCATACCTTTGTGCA
	742	TTCCGATGCCAGTCCCATCTTAAGA	TTCTTAAGATGGGACTGGCATCGGA
	743	TCTGAAACCGTGCGAATCGAGGTGA	TTCACCTCGATTCGCACGGTTTCAG
35	744	TCGGTGTTCCGCGTGTCGAAAAAAT	TATTTTTCGACACGCGGAACACCG
	745	TTCTAGCAGGCCTTTTGAATCGCCA	TTGGCGATTCAAAAGGCCTGCTAGA
	746	TGAGTCACCTCTGAGACGGACGCCA	TTGGCGTCCGTCTCAGAGGTGACTC
	747	TTCTTCTGTCATCCTGCAGCAGCAT	TATGCTGCTGCAGGATGACAGAAGA
	748	TGCGGATGAAACCTGAAAGGGGCCT	TAGGCCCCTTTCAGGTTTCATCCGC
40	749	TGGGCCCCAAACTGGTATCAAGCC	TGGCTTGATACCAGTTTGGGGCCCC
	750	TGCATTGGCTTCGGATTCTCCTACA	TTGTAGGAGAATCCGAAGCCAATGC

751	TAGGCGGCCCAACTGTGAGGTCTTG	TCAAGACCTCACAGTTGGGCCGCCT
752	TACACCATGTGCTCCGCGCTGCAGT	TACTGCAGCGCGGAGCACATGGTGT
753	TACGATGAACATGAATCGGGAGTCG	TCGACTCCCGATTCATGTTCATCGT
754	TCTGCATCCCTGTAGCAGCGCTCCG	TCGGAGCGCTGCTACAGGGATGCAG
755	TGTGCCGTATTTCGACCTGTGCGTT	TAACGCACAGGTCGAAATACGGCAC
756	TGCAGTGCGCACTTCAGTTCAAAAG	TCTTTTGAACTGAAGTĞCGCACTGC
757	TGCGATTTTAAGCGATGCCTTGACG	TCGTCAAGGCATCGCTTAAAATCGC
758	TTAGGTGACCTAGGCTTGCTTGCGG	TCCGCAAGCAAGCCTAGGTCACCTA
759	TCTGGATACCTTGCCTGTGCGGCGC	TGCGCCGCACAGGCAAGGTATCCAG
760	TCCCCTTACGGCTCGTCGTCTATGC	TGCATAGACGACGAGCCGTAAGGGG
761	TGCGCTTGCCCGATGCGATGCATTA	TTAATGCATCGCATCGGGCAAGCGC
762	TTTTCTGTAAGCGGCCTGGGGTTCA	TTGAACCCCAGGCCGCTTACAGAAA
763	TGGCTGAGGTGAGCGGTAAGGATGA	TTCATCCTTACCGCTCACCTCAGCC
764	TTCTTGGCCTCCCGATCTAATTTG	TCAAATTAGATCGGGGAGGCCAAGA
765	TGGAGGTAACGCCGTGTACGTAGGA	TTCCTACGTACACGGCGTTACCTCC
766	TGTAATCCATTTGTGGCTGCGTCAA	TTTGACGCAGCCACAAATGGATTAC
767	TCAAACCCATTCCAGCAGACGCCTG	TCAGGCGTCTGCTGGAATGGGTTTG
768	TTAGGAGGAATTTGGCATGCGGGCG	TCGCCGCATGCCAAATTCCTCCTA
769	TATAGGTAGGATGTGCCCGGCGTTG	TCAACGCCGGGCACATCCTACCTAT
770	TGCAAGTGCTTAGCTCGTCAGCCTC	TGAGGCTGACGAGCTAAGCACTTGC
771	TCTGGCTGTGTCGCATCTCGTTAAC	TGTTAACGAGATGCGACACAGCCAG
772	TCTAACGTCGTCTCGCGCAATCACT	TAGTGATTGCGCGAGACGACGTTAG
773	TTTTCATAAACGTTGTCCCCGAGC	TGCTCGGGGACAACGTTTATGAAAA
774	TAGCAGGAGGACGAACCTCCGCTCC	TGGAGCGGAGGTTCGTCCTCCTGCT
775	TTTCAAGCACCATCGTGCAATCCAA	TTTGGATTGCACGATGGTGCTTGAA
776	TAGCGTCGCCAGTGATCGCTAGTGG	TCCACTAGCGATCACTGGCGACGCT
777	TTACATTCCCTGCCTCCGTGGGCTT	TAAGCCCACGGAGGCAGGGAATGTA
778	TCGCTTCGCGTATTCAGTAGCGGTT	TAACCGCTACTGAATACGCGAAGCG
779	TTCGGACGCGTCGACACTCATTATA	TTATAATGAGTGTCGACGCGTCCGA
780	TTCTGAGCAGGCCAGCGCTCCAGCT	TAGCTGGAGCGCTGGCCTGAGA
781	TTTGAATTGCCAAGCCCTGAAAGCC	TGGCTTTCAGGGCTTGGCAATTCAA
782	TAGTTTTCGCCTTGATGCGTCGGTG	TCACCGACGCATCAAGGCGAAAACT
783	TGTTTCATAGGCCACGCGTGCTAAA	TTTTAGCACGCGTGGCCTATGAAAC
16	TCATCGCTGCAAGTACCGCACTCAA	TTTGAGTGCGGTACTTGCAGCGATG

#### **CLAIMS**

We claim:

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- 1. An oligonucleotide array comprising an array of at least 25 different addresses, each address comprising a different capture probe selected from the group consisting of the sequences set forth in Table 1, Table 2, Table 3 and Table 4.
- 10 2. An array according to claim 1, wherein said capture probes are microspheres.
  - 3. An array according to claim 1 or 2 wherein said array is a liquid array.
  - 4. An array according to claim 1, 2 or 3, wherein said array further comprises a solid support.

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- 5. An array according to claim 1, 2, 3 or 4, wherein said addresses are microspheres and wherein said solid support comprises wells into which said microspheres are individually distributed.
- 6. An array according to claim 1, 2, 3 or 4, wherein each address is a different known location, and said wherein each capture probe is attached to one of said known locations.
  - 7. An array according to claim 1, 2, 3, 4, 5 or 6, wherein said array comprises at least 50 different addresses, each address comprising a different capture probe selected from the group consisting of the sequences set forth in Table 1, Table 2, Table 3 and Table 4.

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- 8. An array according to claim 1,2, 3, 4, 5 or 6 wherein said array comprises at least 100 different addresses, each address comprising a different capture probe selected from the group consisting of the sequences set forth in Table 1, Table 2, Table 3 and Table 4.
- 9. A kit comprising at least twenty-five nucleic acids selected from the group consisting of sequences substantially complementary to the sequences set forth in Table I, Table II, Table III and Table IV or their complement.
- 10. A kit according to claim 9, wherein said kit comprises at least 50 nucleic acids selected from the
   35 group consisting of the sequences substantially complementary to the sequences set forth in
   Table II, Table III and Table IV or their complement.

11. A kit according to claim 9 or 10, wherein said kit comprises at least 100 nucleic acids selected from the group consisting of the sequences substantially complementary to the sequences set forth in Table I, Table II, Table III and Table IV or their complement.

- 5 12. A kit according to claim 9, 10 or 11, wherein said nucleic acids further comprise at least a first universal priming sequence.
  - 13. A kit according to claim 9, 10, 11 or 12, wherein said nucleic acid sequence further comprises a sequence substantially complementary to a target domain.

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- 14. A method of immobilizing a target nucleic acid sequence, said method comprising:

  a) attaching a first adapter nucleic acid to a first target nucleic acid sequence to form a modified first target nucleic acid sequence, wherein said first adapter nucleic acid comprises a sequence substantially complementary to a sequence selected from the sequences set forth in Table I, Table II, Table III, and Table IV;
  - b) contacting said modified first target nucleic acid sequence with an array comprising an array of at least 25 different addresses, each address comprising a different capture probe selected from the group consisting of the sequences set forth in Table 1, Table 2, Table 3 and Table 4, whereby said target nucleic acid sequence is immobilized.

15. A method of detecting a target nucleic acid sequence, said method comprising:

- a) attaching a first adapter nucleic acid to a first target nucleic acid sequence to form a modified first target nucleic acid sequence, wherein said first adapter nucleic acid comprises a sequence substantially complementary to a sequence selected from the sequences set forth in Table I, Table II, Table III, and Table IV;
- b) contacting said modified first target nucleic acid sequence with an array comprising: an array of at least 25 different addresses, each address comprising a different capture probe selected from the group consisting of the sequences set forth in Table 1, Table 2, Table 3 and Table 4; and
- c) detecting the presence of said modified first target nucleic acid sequence.
  - 16. A method of detecting a target nucleic acid, said method comprising:
    - a) hybridizing a first adapter probe with a first target nucleic acid, said first adapter probe comprising a first domain that is complementary to said first target nucleic acid and a second domain, said second domain comprising a first sequence substantially complementary to a selected from the group consisting of the sequences set forth in Table I, Table II, Table III and Table IV to form a first hybridization complex;

b) contacting said first hybridization complex with an enzyme such that when said first domain
of said adapter probe is perfectly complementary with said first target nucleic acid, said
first adapter probe is altered resulting in a modified first adapter probe;

- c) contacting said modified first adapter probe with a population of microspheres comprising at least a first subpopulation comprising a first capture probe, such that said first capture probe and said modified first adapter probe form a second hybridization complex; and
- d) detecting the presence of said modified first adapter probe as an indication of the presence of said target nucleic acid.

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## Description of algorithm to select "best" oligonucleotid adapter sequences.

Requirements for good sequences:

- Generates adequate hybridization signal intensity when employed in an experiment.
- Exhibits minimal cross-reactivity with other adapter sequences.
- Unique within the human genome sequence. This requirement can be extended to the genomic sequence of other organisms such as the fruit fly, the mouse, etc.

One method of generating sequences that meet the above requirements is to randomly generate sequences of given lengths and then pass these filters through a set of heuristic acceptance filters. In particular, the 24-mer Illumina Adapter sequences (IllumaCodes) were chosen as follows.

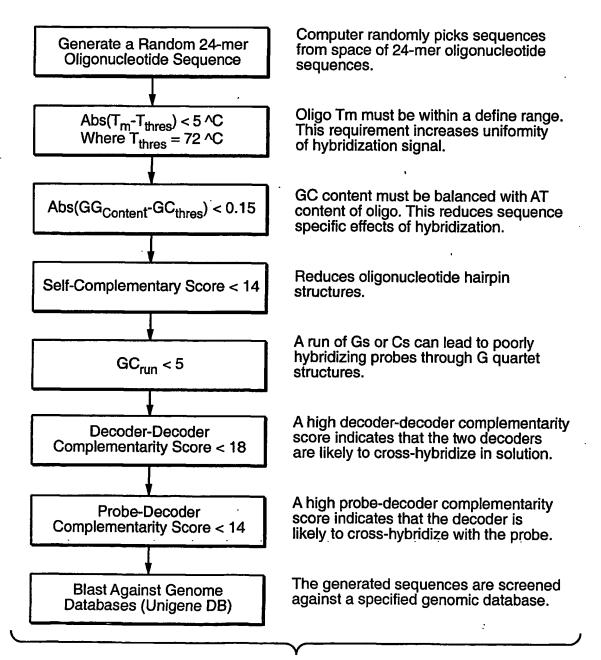


FIG._1

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# Flow diagram for selection of probes sequences

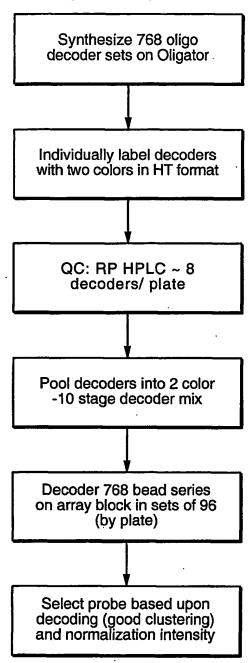


FIG._2

